

Marcus Hook Plant 750 W. 10th Street Marcus Hook, PA 19061 www.braskem.com Braskem

KRIS Hall RECEIVED

APR 01 2016

Air Protection Division

March 31, 2016

James Rebarchak
Regional Air Quality Program Manager
Department of Environmental Protection
Southeast Regional Office
2 East Main Street
Norristown, PA 19401

Re: <u>Title V Annual Compliance Certification</u>

Braskem America, Inc. - Marcus Hook

TVOP 23-00012; Report Period: 1/1/2015 - 12/31/2015

Dear Mr. Rebarchak:

Braskem America, Inc. hereby submits the above-referenced report. This attached report is required by our Title V Permit, Section B, Condition #024.

As required by our Title V Permit, Section B, Condition #026, Braskem America, Inc. hereby states that this facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa Code §127.512(i).

Please note the following contacts at the facility for Title V:

Permit Contact Person

Responsible Official

Name:

Jeffrey Hirt

Conway Yee

Title:

Environmental Engineer

Facility Manager

Phone:

(610) 497-8229

(610) 497-8208

If you have any questions, please do not hesitate to contact our *Environmental Engineer*, Jeffrey Hirt, at the above number or by e-mail at jeffrey.hirt@braskem.com.

Sincerely,

BRASKEM AMERICA, INC.

Conway Yee

Facility Manager

cc: Air Enforcement Branch (3AP12)

U. S. Environmental Protection Agency, Region III

1650 Arch Street

Philadelphia, PA 19103-2029

## PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

## BUREAU OF AIR QUALITY COMPLIANCE CERTIFICATION FORM

(25 Pa. Code § 127.513)

Plant Name:	BRASKEM AMER INC/MARCUS HOOK	Owner/Operator:	BRASKEM AMER INC
Tay ID/Dlant.			
ייים ייים ייים ייים ייים ייים ייים ייי	25-1534498-1	DEP Facility ID:	515469
Contact Dorcon.			
	JEFFKEY HIKI	Title:	ENVIRONMENTAL ENGINEER
Operating Permit #:	22 00042		
· L	77,000,75	Phone Number:	(610) 497-8229
			20

For the period 01/01/2015 – 12/31/2015, BRASKEM AMER INC/MARCUS HOOK has been in continuous compliance with all applicable requirements of permit # 23-00012, determined by the method(s) of compliance specified in said permit, except for the following deviations, exceedances and excursions:

Sert /Cond # Citation #	***************************************	,					
# :0000:	Citation #	Source	Noncompliance	Monitoring Method(s)	Date	Duration	Corrective Action(s)
В / 007	(a)	General Require- ment	Permittee did not comply with all conditions of this permit.	Company policy and our knowledge, information and belief formed after a reasonable inquiry, except as otherwise set forth in this certificate of compliance.	See below Deviations	See below Deviations	See below Corrective Actions
D/106 D/107	016	106	Miscellaneous caps missing from open-ended lines.	Visual inspection	3/18/15, 3/23/15, 4/2/15	N/A	Each missing cap was immediately replaced upon discovery of openended line.

Page 01	monthly car seal inspection	program. Necessary car seals will	confirm correct position. Any	maintenance which would require these car seals to be removed will he documented								Facility personnel immediately investigated and then promptly	initiated response actions including	a shutdown of the unit to enable	repair and to terminate the release	event. Braskem has designed and implemented policies and	procedures for incident reporting	requirements.	5.2					Facility was in a significant	maintenance outage duffig	event. Additional training and	communications were	preventative maintenance tasks
V/V	Y/N											N/A												N/A				
7,700,77	1/1/2013	4/30/2015										2/1/15												2/25/15				
	Routine operator rounds, safety procedures, and facility MOC	process.										Routine operator rounds,	and facility MOC process.											Facility preventative	maintenance program and	environmental task tracking	system.	
	Although Braskem does not	own or operate	the flare associated with	these sources, a separate Braskem	program did not exist to car seal	valves in either	the open or	closed position to document that no	potential flare	bypasses	occurred.	Release event	was prohibited	air pollution as	defined in 25 PAC	121.1 and 25 PAC	.1.02.1.		Permittee did not	provide sufficient	notification to	PADEP as defined	in these citations.	The facility did	not perform the	manufacturer's	recommended	weekly
	107	107	106	106								106	106		106	106								108				
3: Version 1.2	002(b)	600	001(b)	800								001	002		012(b)	012(d)(3)								700		600	013(a)	(2)(2)
November 30, 1998: Version 1.2	D/107	D/107	D/106	D/106					8		ti)	U	U		U	U			200					D/108	8			

Jo

Page

Page of	are completed regardless of the operation of the production facility.		N/A On June 30, 2015 from approximately 1:37 pm to 2:25 pm	there were isolated durations	totaling approximately six minutes	flare pilot instruments was	showing failure. During this period	the facility was experiencing a	process upset with a vent recovery	compressor while also	experiencing high wind gusts. All	other flare operating requirements	were in the normal operating	range. Flare instrumentation and	alarms continue to be calibrated	and monitored on an established	frequency. The emissions	generated during this duration will	be included in the facility's	
			6/30/15 N																	_
		D de technished	installed on the flare tip	dedicated to the continuous	presence.															
maintenance for	one isolated week in this	Enclire flare ic	meeting the	flame presence at	all times.															
		102A	102B	,	103A	103B														
November 30, 1998: Version 1.2		002	003	012	1	011														
November 30, 19		D/102A	D/102B	D/103A		D/ 103B														

November 30, 1998: Version 1.2

## Certification of Truth, Accuracy and Completeness

Subject to the penalties of Title 18 Pa. C.S. Section 4904 and 35 P.S. Section 4009 (b) (2), I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this form are true, accurate, and complete.

Name:	Conway Yee	Title:	Facility Manager
Signed:	Mar Mar	Date:	3/31/16

This certification must be signed by a responsible official. Any certification submitted without a valid signature will be returned.

more spaces are needed, complete additional pages using the format shown in Addendum 1. This certification does not replace requirements pertaining to the The owner/operator shall identify any other material information needed in this certification to also comply with section 113(c)(2) of the Clean Air Act. If submission of malfunction and CEM reports. DO NOT include that information on this form. 988783

Citation	Permit	Terms & Conditions Contained	Means of Determining	aga -
	Section	in the Permit	Compliance Status	with Terms &
[25 Pa. Code §§	Section B		The renewal application	conditions was:
127.414, 127.446(e) & 127.503]		(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not	was submitted to PADEP on 7/18/2013 and deemed	Intermittent
(Permit Renewal)		more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air M	applicable information and fees were submitted with the renewal application	17
[25 Pa. Code § 127.513, 35 P.S. §	Section B		A guard is on duty at the	⊠Continuous
the CAA]		may be required by law for inspection and entry purposes, the	normal business hours to	□Intermittent
(Inspection and Entry)		Protection or authorized representatives of the Department to	authorized representatives to enter the facility Rassa	
		î	upon knowledge,	
			facility never denied	
		(1) Enter at reasonable times upo	entrance to PADEP or its	
			in this reporting period.	
			(c) Statement of law that	
			obligations and is thus not	
[25 Pa. Code §§ 127.25. 127 444 &	Section B		First sentence of (a), With	Continuose
127.512(c)(1)]		(a) The permittee shall comply with the conditions of this permit.	S)	⊠Intermittent
(Compliance Requirements)		Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:		
		G.	permit were in compliance	
	25.2		with all permit terms and	
			compliance review period	
			compliance leview period,	

Citation	23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation  Permit  Section	Terms & Conditions Contained in the Permit
-		(1) Enforcement action
		(2) Permit termination, revocation
		8

	127.704, 127.705 &	127.541] (Significant Operating Permit Modifications)	[25 Pa. Code §§ 127.411(d) & 127.512(c)(5)] (Duty to Provide Information)		Citation
	Section B	o vecion d	Section B	Section	Permit
some property of the property	(a) The permittee shall pay fees to the Department in	When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541.	(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.	in the Permit	Terms & Conditions Contained
provided by the	Permit fees were paid according the invoice	Statement of law that imposes no compliance obligations and is thus not amenable to certification.	PADEP made a determination of the physical configurations or design details in applications for plan approvals/ installation permits and operating permits which are essential for compliance with the applicable requirements of the Title V permit. Therefore, no certification is required.  Facility has supplied all information requested by PADEP within a reasonable time.  Facility has supplied copies of records requested by PADEP within a reasonable time.	Compliance Status	Means of Determining
	⊠Continuous	⊠Continuous □Intermittent	⊠Continuous □Intermittent	with Terms & Conditions was:	Compliance

	There were no minor	issuance of a permit modification. The permittee shall provide		(Authorization for De Minimis Emission
[	Change procedure.	(a) This permit authorizes de minimis emission increases nom a new or existing source in accordance with 25 Pa. Code §§		127.449]
Intermittent	reviewed within the		Section B	[25 Pa. Code §§ 127.14(b) &
Continuous	certification.			
	obligations and are thus not amenable to			
	(f) Statements of law that impose no compliance			
	certification.			
	obligations and are thus not amenable to			
	impose no compliance			
	Cel till Canoli.			
	not amenable to			
	impose no compliance obligations and are thus			
, , ,	(d) Statements of law that			
	certification.			
	obligations and are thus			
	impose no compliance	1st of each year, pay applicable annual		
	(a) Ottomorphic of low that	(b) Emission Fees. The permittee shall, on or before September		
	previous calendar year.			
	permit fees were paid by			
	Applicable annual Title V	Chapter 127, Subchapter I (relating to plan approval and operating permit fees).		(Fee Payment)
□Intermittent	Department.	accordance with the applicable fee schedules in 25 Pa. Code		127.707]
Conditions was.				1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
with Terms &	Compliance Status	in the Permit	Section	
Compilation	Means of Determining	lerms & conditions contained	Citation Permit	Citation

	otherwise be in violation of			
☐Intermittent	changes that would require a plan approval during this compliance review period.  The facility did not use a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which would conceal or dilute an emission of air contaminants which would	(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction,		(Circumvention)
⊠Continuous	There were no physical		Section B	[25 Pa. Code §§ 121.9 & 127.216]
⊠Continuous □Intermittent	There were no sources which were reactivated during this compliance review period.	(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source wil	Section B	[25 Pa. Code §§ 127.215] 127.11a & 127.215] (Reactivation of Sources)
	sources installed or deminimis increases of the mentioned minor sources during this compliance review period.  (f) Statements of law that impose no compliance obligations and are thus not amenable to certification.	no Department with sever (1) days prior Written		
Conditions was:		the Department with seven (7) days price		Increases)
with Terms &	Compliance Status	in the Permit	Section	
Compliance	Means of Determining	l erms & Conditions Contained		Omion
		1	Permit	Citation

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK 127.402(d) & (Submissions) 127.513(1)] [25 Pa. Code §§ and Monitoring Procedures) 504(b) of the CAA] 139; & 114(a)(3), 127.463(e); Chapter (Sampling, Testing 127.441(c) & [25 Pa. Code §§ Citation Section B Section B Section Permit requests for renewal of the permit shall be submitted to the: (a) Reports, test data, monitoring data, notifications and of this Title V permit. In addition to the sampling, testing and analysis procedures or test methods for applicable requirements shall comply with any additional applicable re... monitoring procedures specified in this permit, the Permittee (a) The permittee shall perform the emissions monitoring and (b) Any repor... PA Department of Environmental Protection Regional Air Program Manager (At the address given on the permit transmittal letter, or otherwise notified) Terms & Conditions Contained in the Permit compliance review period Pollution Control Act or the either PADEP or EPA. appropriate address of were submitted to the there under during this regulations promulgated this permit, the Air All required submissions certifications submitted All applications, forms, the responsible official. certification statement by contained the required reports or compliance under the Clean Air Act additional applicable as needed. There were no this permit were performed procedures specified by testing, and sampling Monitoring, analysis, after permit issuance. requirements promulgated Means of Determining procedures specified by testing, and sampling Monitoring, analysis, Compliance Status ☐Intermittent **⊠**Continuous Conditions was: Intermittent with Terms & Compliance

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation

Permit

•	τ	J	
5	ט		
ċ	Ď		
		í	
_	`	1	

	were performed, as			
	Reporting requirements			
	additional applicable requirements promulgated under the Clean Air Act after permit issuance.	permittee shall comply with any additional applicable reporting requirements promulgated under the Clean		(Reporting Requirements)
⊠Continuous □Intermittent		(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit.		127.411(d), 127.442, 127.463(e) & 127.511(c)]
			Section B	[25 Pa. Code §§
	recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135.	(2) The dates the analyses were performed.		
	Facility has maintained and made available, upon request of the Department, all records required to comply with reporting,	(1) The date, place (as defined in the permit) and time of sampling or measurements.		
⊠Continuous □Intermittent	and made available, upon request of the Department, all records of required monitoring information.	(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:		(Recordkeeping Requirements)
	Facility has maintained		Section B	[25 Pa. Code §§
	requirements of 25 Pa Code Chapter 139 or by the Clean Air Act, as needed.			
	this permit were conducted in accordance with the		***************************************	
Conditions was:				
with Terms &	Compliance Status	in the Permit		
Compliance	Means of Determining	Contailed	Section	
Page 7		Terms & Conditions Contained	Permit	Citation

Page 8

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK Certification) 127.513] [25 Pa. Code § (Compliance 127.512(i) and 40 127.441(d), CFR Part 68] [25 Pa. Code §§ Citation Section B Section B Section Permit a certificate of compliance with the terms and conditions in this each year thereafter, unless specified elsewhere in the permit, permit, for the previous year, includi... the permittee shall submit to the Department and EPA Region III (a) One year after the date of issuance of the Title V permit, and (a) If required by Section 112(r) of the Clean Air Act, the program consistent with requirements of the Clean Air Act, 40 permittee shall develop and implement an accidental release CFR Part 68 (relating to chemical accident prevention Terms & Conditions Contained in the Permit statement by the required certification All applications, forms, reports or compliance responsible official. needed, and contained the the responsible official. certification statement by contained the required certifications submitted not amenable to PADEP and is therefore imposes obligations on certification by Braskem. The first sentence of (d) statement of law. Means of Determining The second sentence is a All applications, forms requirement. intended to satisfy this certifications submitted reports or compliance The certification report is the responsible official. certification statement by contained the required Braskem America, Inc. Management Plan (RMP). has developed & implemented a Risk Compliance Status Braskem America, Inc. has Conditions was: ∐Intermittent **⊠**Continuous with Terms & Compliance \_Intermittent

	Citation	Permit	Terms & Conditions Contained		rage 9
		Section	Dalitations	Means of Determining	Compliance
	The second		in the Permit	Compliance Status	with Terms &
	(Risk Management)		provisions) and the Federal Chemical Softial S		Conditions was:
			S Site	prepared a written RMP meeting the requirements of 40 CFR Part 68. The original RMP was submitted to the EPA on or before June 21, 1999. A resubmittal of the RMP was submitted on June 17, 2004, June 15, 2009, and December 31, 2012. The most recent correction was completed May 4, 2015.  (b) This is a historical requirement and imposes no specific requirements during the current period.  (c) Statement of law that imposes no compliance obligations and is thus not amenable to certification.  (d) In the cover letter for the facility's Annual Certification Report, the following statement was included:	
				Facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).	
Г				(e) Facility has maintained	- 100 (100 (100 (100 (100 (100 (100 (100

Citation Permit Section			[25 Pa. Code §121.7] (Prohibition of air pollution.)					
Permit Section			Section C - I. Restrictions - Emission Restriction(s)					
Terms & Conditions Contained in the Permit			No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. § 4003).					
Compliance Status	records supporting implementation of accidental release program for the past five (5) years.	(f) This is a historical requirement and imposes no specific requirements during the current compliance review period. Facility has registered and submitted RMP.	Release event which occurred on 2/1/15 was prohibited air pollution as defined in 25 PAC 121.1 and 25 PAC 123.1.	Permittee did not provide sufficient notification to PADEP as defined in these citations.	Facility personnel immediately investigated and then promptly initiated response actions including a shutdown of the unit to enable repair and to	terminate the release event. Braskem has	designed and implemented policies and	procedures for incident
with Terms & Conditions was:			☐Continuous					

7 9 95	3					
§123.2] (Fugitive particulate matter)				§123.1] (Prohibition of certain fugitive emissions)	[25 Pa. Code	
Section C - I. Restrictions - Emission Restriction(s)				Restrictions - Emission Restriction(s)	Section C - I	Section
No person may permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in Section C, Condition # 002 if the emissions are visible at the point the emissions pass outside the person's property.	(c) Use of roads a	(b) Grading, paving and maintenance of roads and streets.	(a) Construction or demolition of buildings or structures.	Except as permitted herein, no person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the		in the Permit
To control the emissions of fugitive particulate matter, the facility has work practices in place, in accordance with applicable regulatory	response actions including a shutdown of the unit to enable repair and to terminate the release event. Braskem has designed and implemented policies and procedures for incident reporting that are consistent with permit requirements.	Facility personnel immediately investigated and then promptly initiated	Permittee did not provide sufficient notification to PADEP as defined in these citations.	Release event which occurred on 2/1/15 was prohibited air pollution as defined in 25 PAC 121.1 and 25 PAC 123.1.	reporting that are consistent with permit requirements.	Means of Determining Compliance Status
⊠Continuous □Intermittent				□Continuous ⊠Intermittent		Compliance with Terms & Conditions was:

23-00012 - BRASKEM AME	23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation  Permit	Terms & Conditions Contained	Means of Determining	Compliance
Citation	Section	in the Permit	Compliance Status	with Terms & Conditions was:
A Section of the sect			requirements for PM and	
			as specified by individual	
			conditions below. These	
			practices include a	
			process for review and	
			correction of deviations	
			reported via routine "odor	
			and visible emission	
			inspections" and the	
			facility's total event	
			reporting process.	
			Compliance review for this	
			term consisted of a review	
			by Braskem America, Inc.	
			staff of the reports and	
			records associated with	
			these work practices.	
			To prevent the detection of	⊠Continuous
2433 341	Restrictions -		malodors outside of the	Intermittent
8120.01]	Emission	A person may not permit the emission into the outdoor	property, the facility has	
(Limitations)	Restriction(s)	atmosphere of any malodorous air contaminants from any	work practices in place, in	
		source in a manner that the malodors are detectable outside the	accordance with	
		property of the person on whose land the source is being	applicable regulatory	
		operated.	requirements and as	
			specified by individual	
			permit terms and	
-			conditions below. These	
			practices include a	
			process for review and	
			correction of deviations	
			reported via routine "odor	
			and visible emission	

		(a) The presence of uncombined water is the only reason for failure of the emission to meet the limitations;		
⊠Continuous □Intermittent	Statements of law that impose no compliance obligations and are thus not amenable to certification.	The emission limitations of 25 Pa. Code § 123.41 shall not apply when:	Restrictions - Emission Restriction(s)	§123.42] (Exceptions)
⊠Continuous □Intermittent	total event reporting process, and the hydrocarbon Leak Detection and Repair program. Compliance review for this term consisted of a review by Braskem America, Inc. staff of the reports and records associated with these work practices.  Performed weekly observations (modified Method 22) using "Odor and Fugitive Emissions" inspection form submitted to the Department for review/approval on 4/16/2009. Additionally, at the flare, an automated system is in place to measure the propensity of the flame to smoke and add steam to mitigate smoking.	A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:  (a) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour.	Section C - I. Restrictions - Emission Restriction(s)	[25 Pa. Code §123.41] (Limitations)
with Terms & Conditions was:	Compliance Status	in the Permit	Section	
Compliance	Means of Determining	lerms & Conditions Contained	T GILLE	Cincin
(		4	Dormit	Citation

(b) The emission results from the operation of equipment used solely to train and test persons in observing the opact  Section C - I. No person may permit the open burning of material in an air Emission Restrictions. Emission Restriction(s)  (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.  (2) A fire set for the purpose of inst  Section C - II. Testing (a) The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirement.  Section C - III. Monitoring  Requirements  (b) If at any time the Department has cause  Statements of law that impose no compliance obligations and are thus not amenable to certification.  This is a historical requirement which imposes requirements of law that impose no compliance with any applicable requirement which imposes requirement which imposes requirement which imposes requirements of law that impose no compliance with any applicable requirement which imposes requirements of law that impose no compliance with any applicable requirements of law that impose no compliance with any applicable requirements of law that impose no compliance with any applicable requirements of law that impose no compliance with any applicable obligations and are thus not amenable to certification.	23-00012 - BRASKEM AME	23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation Permit	Terms & Conditions Contained	Means of Determining	Compliance
(b) The emission results from the operation of equipment used solely to train and test persons in observing the opaci  No person may permit the open burning operations result from: basin, except where the open burning operations result from: emission Restriction(s)  (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer:  (2) A fire set for the purpose of inst  (2) A fire set for the purpose of inst  (3) The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirements.  (b) If at any time the Department has cause  (c) If at any time the Department and maintained to performance testing, a large performance testing, and an area thurs in the propose requirements of performance testing, as the facility testing the		Section	in the Permit	Compliance Status	with Terms & Conditions was:
Section C - I.  No person may permit the open burning of material in an air any of the listed fire Emission Emission (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.  (2) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.  (2) A fire set to prevent or abate a fire hazard, when approved by the Department the supervision of a public officer.  (2) A fire set to prevent or abate a fire hazard, when approved by the Department the supervision of a public officer.  (3) A fire set to prevent or abate a fire hazard, when approved by the Department provided by the Department and set by or under the supervision of a public officer.  (2) A fire set to prevent or abate a fire hazard, when approved by the Department provided by the Department and set by or under the supervision of a public officer.  Statements of law that impose no compliance obligations and are thus not amenable to purpose including determining compliance with any applicable requirements.  (b) If at any time the Department has cause  (b) If at any time the Department and maintained to performance testing, when the facility measures visible emissions, such as during performance testing, a			(b) The emission results from the operation of equipment used solely to train and test persons in observing the opaci		
testing (a) The Department and set by or under the supervision of a public officer.  (2) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.  (2) A fire set for the purpose of inst  (3) The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirement.  (b) If at any time the Department has cause  (b) If at any time the Department has cause  (c) If at any time the Department has cause  (b) If at any time the Department and maintained to performance testing, and a public officer.  (a) The Department of a public of a public officer.  Statements of law that impose no compliance obligations and are thus not amenable to certification.  This is a historical requirement which imposes requirement which imposes requirements of the during performance testing. When the facility measures visible emissions, such as during performance testing, and a public officer.	[25 Pa. Code §129.14]	Section C - I. Restrictions - Emission	No person may permit the open burning of material in an air basin, except where the open burning operations result from:	Braskem did not conduct any of the listed fire exercises that required	⊠Continuous  ☐Intermittent
de Section C - II.  Statements of law that impose no compliance obligations and are thus resting of any source(s) as necessary to verify emission fee, malfunctions, or determining compliance with any applicable requirement.  (b) If at any time the Department has cause  Statements of law that impose no compliance obligations and are thus not amenable to purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirement.  (b) If at any time the Department has cause  Section C - III.  Monitoring Visible emissions may be measured using either of the following:  (a) A device approved by the Department and maintained to performance testing, a	(Open burning operations)	Restriction(s)	(1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.	specific Department approval.	
Section C - II. Testing Requirements  (b) If at any time the Department has cause  (b) If at any time the Department has cause  (c) If at any time the Department has cause  (b) If at any time the Department has cause  This is a historical requirement which imposes requirement which following:  (a) The Department reserves the right to require exhaust stack and the testification.  This is a historical requirement which imposes requirement which imposes requirements during performance testing. When the facility measures visible emissions, such as during performance testing, a			(2) A fire set for the purpose of inst		
testing of any source(s) as necessary to verry emissions fee, purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirement.  (b) If at any time the Department has cause  Section C - III.  Monitoring Requirements following:  (a) A device approved by the Department and maintained to performance testing, a lost of any source(s) as necessary to verry emissions fee, cartification.  In not amenable to certification.  Certification.  This is a historical requirement which imposes requirements during performance testing. When the facility measures visible emissions, such as during performance testing, a	[25 Pa. Code §127.441]	Section C - II. Testing Requirements	(a) The Department reserves the right to require exhaust stack	Statements of law that impose no compliance obligations and are thus	⊠Continuous  ☐Intermittent
(b) If at any time the Department has cause  Section C - III.  Monitoring Requirements following:  (a) A device approved by the Department and maintained to performance testing, a	(Operating permit terms and conditions.)		testing of any source(s) as necessary to verity emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirement.	not amenable to certification.	
Section C - III.  Monitoring  Visible emissions may be measured using either of the imposes requirements during performance testing. When the facility measures visible emissions, such as during performance testing, a  (a) A device approved by the Department and maintained to performance testing, a			(b) If at any time the Department has cause	This is a historical	⊠Continuous
following:  during pe testing.  measure emission  performa	[25 Pa. Code §123.43]	Section C - III.  Monitoring  Requirements	Visible emissions may be measured using either of the	This is a historical requirement which imposes requirements	☐Intermittent
	(Measuring techniques)		following:	(D)	
			(a) A device approved by the Department and maintained to	emissions, such as during performance testing, a	

	Braskem America, Inc.			
	consisted of a review by			
	review for this term			
	program. Compliance			
	Detection and Repair			
	hydrocarbon Leak			
	process, and the			
	total event reporting			
	inspections", the facility's			
	and visible emission	(		
	reported via routine "odor			
	correction of deviations			
	process for review and			
	practices include a	and 123.2)		
	conditions below. These	(3) Firmitive Particulate Matter (a. 1919)		
	permit terms and	123.42).		
	specified by individual	(2) Visible Emissions (as per 25 Pa. Code §§123.41 and		
	requirements and as			
	applicable regulatory			
	accordance with	(1) Odors which may be objectionable (as per 25 Pa. Code		conditions.)
	work practices in place, in	00000 0000000		terms and
□Intermittent	property, the facility has		35	(Operating permit
	malodors outside of the	as, ici na lollowilly.	Requirements	
⊠Continuous	To prevent the detection of	day for the following	Monitorina	8127.4411
		(a) The permittee shall monitor the facility	Section C - III.	[25 Pa. Code
	compliance review period.			
	certification during this			
	not amenable to			
	thus this requirement is			
	compliance review period,	the Dep		
	required during this	with the naked eye or with the aid of any devices approved by		
	measurements were	(b) Observers, trained and qualified, to measure plume opacity		
	quantitative			
	Additionally, no			
	Addition of the control of the contr	TO SERVICE ACCUMULATION OF THE PROPERTY OF THE		
	troip of other	provide accurate opacity measurements		
Conditions was:				
with Terms &	Compliance Status	In the Permit		
Compilative	Ġ.		Section	
Compliance	Means of Determining	rerms & Conditions Contained		
		Tomas of the control	Permit	Citation

23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation Permit	Permit	Terms & Conditions Contained	Means of Determining	Compliance
Ciario	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			staff of the reports and records associated with these work practices.	
			In the event odors or emissions are detected outside the facility, facility has work practices to report, investigate &	
			report, investigate & mitigate the incident. A permanent log of the "odor and visible emission	
			inspections" forms are kept onsite.	
			(c) Statement of law that imposes no compliance	
			Toolists has work practices	Continuous
[25 Pa. Code §127.441]	Section C - IV.  Recordkeeping  Requirements	[Additional authority for this permit condition is also derived from	and procedures in place in accordance with	□Intermittent
(Operating permit terms and		25 Pa. Code § 127.511.]	applicable regulatory requirements and as	
conditions.)		(a) The permittee shall maintain a record of all monitoring of	terms and conditions of	
		fugitive emissions, visible emissions and odors, including those	practices include a	
		that deviate from the conditions lound in this permit.	process for review and	
		Of deviati	correction of deviations	
			and visible emission	
24			inspections" and the	
			facility's total event	

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK
Citation Permit

	U
4	n
G	2
1	D
	7

324 6930	requirements.			
	consistent with permit			
	reporting that are			
	procedures for incident			
	implemented policies and			
	designed and			
	event. Braskem has	0.90		
	terminate the release			
	enable repair and to			
	a shutdown of the unit to			
	response actions including			
	and then promptly initiated			
	immediately investigated			5000
	Facility personnel			
	these citations.			
	PADEP as defined in			
	sufficient notification to			
	Permittee did not provide	the previous year		
	allu 23 FAC 123.1.	year, for the period covering January 1 through December 31 of		
	defined in 25 PAC 121.1	(1) An annual certificate of compliance due by Anall 2		
and several se	prohibited air pollution as			
	occurred on 2/1/15 was	(a) The permittee shall submit the following reports:		conditions.)
	7			terms and
⊠Intermittent	requirement.			(Operating permit
Continuous	intended to satisfy this	23 Fa. Code § 127.511(c).]	Requirements	
Casti	This certification report is	[Additional authority for this permit condition is also derived from	Reporting	§127.441]
	approval on 4/16/2009.			135 Do Codo
	to the Department for			
	necessary record formats			
	Facility submitted the			
	reporting process.			
Conditions was:				
with Terms &	Compliance Status	ייי מופ רפוווונ		
Compliance		in the Domit	Section	
College	Means of Determining	certifis & Conditions Contained		
- age /		Tomas 0 0 1121	Permit	CITATION

	וחבווווופח פסמוסכם יייופים		Dractice Standards	[10]
N Continuous	Facility does not have any		Section C - VI. Work	125 Pa Code
-	these work practices.			
	records associated with			
	staff of the reports and			
	by Braskem America, Inc.			
	term consisted of a review			
	Compliance review for this			
	reporting process.		052	
	facility's total event			
	inspections" and the			
	and visible emission			
	reported via routine "odor		7/2	26
	correction of deviations	141		
	process for review and			
	practices include a			
	this permit. These	(a) Use, where possible, of water of chemicals for common		
	terms and conditions of	is the of water or chemicals for control of dust		
	as specified by individual			
	requirements for PM and			emissions)
	applicable regulatory	but not be limited to, the following:		certain fugitive
	accordance with	matter from becoming airborne. These actions shall include,		(Prohibition of
	practices in place, in	permittee shall take all reasonable actions to prevent particulate		
Intermittent	the facility has work	For any source specified in Condition #002 of this Section, the	Practice Standards	§123.1]
] [	fugitive air contaminants,		Section C - VI. Work	[25 Pa. Code
⊠Continuous	To control the emissions of			
	obligations and is thus not amenable to certification.	sources, new sources which were first operated during the preceding calendar year and sources modified during the same		
	(b) Statement of law that	year, a source report for the preceding calendar year. The report shall include information for all previously reported		(Reporting)
Intermittent		(a) The owner or operator shall submit, by March 1 of each	Requirements	§135.3]
	the Department by March		Section C - V.	[25 Pa. Code
⊠Continuous	Deports were submitted to			
with Terms & Conditions was:	Compliance Status	in the Permit	Section	
	Micallo of Corollining	Terms & Conditions Contained	Citation Permit	Citation

Citation	Permit	Terms & Conditions Contained		Lage 18
.1	Section	Contained	Means of Determining	Compliance
I I		in the Permit	Compliance Status	with Terms &
§127.441]		(a) The permittee shall begin to immediately implement	there was a required	Was:
(Operating permit terms and conditions.)		measures, which may include for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) indentified in Section A. of th	action to implement measures to reduce emissions.	☐Intermittent
101A - PLANT 1, THREE STORAGE SII OS	Section D - I. Restrictions - Emission	No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of	Based on emissions	⊠Continuous
[25 Pa. Code §123.12]	Restriction(s)	particulate mattter in the effluent gas exceeds 0.04 grains per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.	design specifications in the permit application, the particulate matter	□Intermittent
(Incinerators)			emissions do not exceed 0.04 grains per dry standard cubic foot	
101A - PLANT 1, THREE STORAGE SILOS	Section D - I. Restrictions - Emission Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	VOC emissions for the 101A silos are calculated	⊠Continuous
[25 Pa. Code	Nestriction(s)		monthly using approved emission calculation	□Intermittent
§127.441]		(a) The total Volatile Organic Compounds (VOC) emissions from	methodologies. A 12-	
(Operating permit terms and			determined and compared	
conditions.)		(b) The polypropylene Plant Nu	against the 37.10 ton per 12 month rolling sum emission limit.	
101A - PLANT 1, THREE STORAGE SILOS		The total volatile organic compounds (VOC) emissions from the three (3) silos shall not exceed 12.10 tons on a 12-month rolling	VOC emissions for the 101A silos are calculated	⊠Continuous
[25 Pa. Code §127.441]	Restriction(s)		monthly using approved emission calculation methodologies. A 12-	Intermittent
(Operating permit terms and		0.0.7	month rolling sum is determined and compared against the 12 10 top per	
			12 month rolling sum	

Page 20

SILOS Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK conditions.) §127.441] THREE STORAGE SILOS [25 Pa. Code 101A - PLANT 1, terms and conditions.) §127.441] THREE STORAGE 101A - PLANT 1, (Operating permit SILOS conditions.) terms and [25 Pa. Code (Operating permit THREE STORAGE Performance for Standards of [40 CFR Part 60 101A - PLANT 1, Citation Monitoring Section D - III. Requirements Section D - VII. Additional Recordkeeping Section D - IV. Requirements Requirements Section Permit a monthly basis. 25 Pa. Code § 127.511] [Additional authority for this permit condition is also derived from (a) The permittee shall monitor the polypropylene production on monthly basis and 12 month rolling sum, using DEP approved (b) The permittee shall calculate the VOC emissions on a 25 Pa. Code § 127.511] [Additional authority for this permit condition is also derived from methods The permittee shall keep records of Subpart DDD, as per the definition of 'commenced' in 40 C.F.R. §60.2, and the applicability specified in 40 C.F.R. rolling sum. §60.560(b)(1)(ii). The silos are not subject to the provisions of 40 C.F.R. 60 (a) the monthly polypropylene production. (b) the VOC emissions calculated monthly and 12-month Terms & Conditions Contained in the Permit Production is tracked emission limit monthly; a 12-month production limit. compared to the is calculated and rolling sum production rate using November 2011 VOC emissions calculated 12-month rolling test results. Plant 2 storage silos stack file. summation of production is calculations are kept on tracked monthly. VOC emissions Means of Determining amenable to certification. Statement of law not Compliance Status ∐Intermittent Conditions was: **⊠**Continuous ☐Intermittent with Terms & **⊠**Continuous Compliance □Intermittent

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK
Citation Permit

Page 21

~ ·~							
§127.441] (Operating permit	THREE STORAGE SILOS	(Operating permit terms and conditions.)	THREE STORAGE SILOS [25 Pa. Code §127.441]	[25 Pa. Code §123.13] (Processes) 101B - PLANT 2,	(Applicability and designation of affected facilities.)  101B - PLANT 2, THREE STORAGE SILOS	New Stationary Sources §40 CFR 60.560]	Ciation
	Restrictions - Emission Restriction(s)		Restrictions - Emission Restriction(s)	Restriction(s)  Section D - I.	Section D - I. Restrictions - Emission		Section
	VOC emissions from the three silos shall not exceed 1.06 pounds per hour and 4.64 tons per year as 12-month rolling sum.	24.30 tons per year on a twelve (12) month rolling basis.  (b) The combined Particulate Matt	25 Pa. Code § 127.512(h).]  (a) The combined Volatile Organic Compounds (VOC)		No person may permit the emission into the outdoor atmosphere of particulate matter in a manner that the concentration of particulate matter in the officers.		Terms & Conditions Contained in the Permit
methodologies. A 12- month rolling sum is determined and compared	VOC emissions for the 101B silos are calculated monthly using approved	determined and compared against the 24.3 ton and 2.1 ton per 12 month rolling sum emission limit.	VOC and PM emissions for the 101B silos are calculated monthly using approved emission calculation methodologies.	design specifications in the permit application, the particulate matter emissions do not exceed 0.04 grains per dry standard cubic foot.	Based on emissions calculations using the		Means of Determining Compliance Status
500 750	⊠Continuous □Intermittent		⊠Continuous □Intermittent	□Intermittent	⊠Continuous	Conditions was:	Compliance with Terms &

Page 22

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK SILOS conditions.) terms and 60.560] THREE STORAGE 101B - PLANT 2, Sources §40 CFR Performance for Standards of [40 CFR Part 60 SILOS designation of **New Stationary** §127.441] affected facilities.) (Applicability and THREE STORAGE 101B - PLANT 2, [25 Pa. Code SILOS conditions. terms and (Operating permit THREE STORAGE 101B - PLANT 2, [25 Pa. Code Citation Emission Restrictions -Section D - I. Restriction(s) Section D - III. Monitoring Requirements Recordkeeping Section D - IV. Requirements Section Permit Subpart DDD, the actual weight percent total organic compound In order for this source to not be subject to 40 C.F.R. Part 60 as per 40 C.F.R. §60.650(g). (TOC) emissions from the silos shall be less than 0.10 percent 25 Pa. Code §127.511] [Additional authority for this permit condition is also derived from monthly. (a) The permittee shall monitor the polypropylene production [Additional authority for this permit condition is also derived from 25 Pa. Code §127.511] monthly and 12 month rolling sum, using Department approved methods. (b) The permittee shall calculate the VOC and PM emissions Terms & Conditions Contained in the Permit rolling sum emission limit. 4.64 ton per 12 month against the 1.06 lb/hr and of source 101B which conducted on 11/22/2011 A representative test was demonstrates this requirement. summation of production is 12-month rolling Means of Determining is tracked monthly. of PM and VOC emissions month rolling summation tracked monthly. 12summation of production is 12-month rolling month rolling summation tracked monthly. 12-Compliance Status Conditions was: Intermittent □Intermittent with Terms & Compliance Intermittent

Citation	Permit	Tarme & Canditians Cont.		Page 23
	Section	Daurious contained	Means of Determining	Compliance
	00000	in the Permit	Compliance Status	with Terms &
§127.441]		The permittee shall keep records of		Coliditions was:
(Operating permit			of PM and VOC emissions is tracked monthly.	
conditions.)		(a) the polypropylene production monthly.		
		3		
		(b) the VOC and PM emission calculations monthly and 12 month rolling sum.		
102A - PLANT 1	Section D - I.	[Additional authority for this permit condition is also derived from	VOC emissions for the	
MFG SOURCES	Emission Restriction(s)	25 Pa. Code § 127.512(h).]	102A sources are calculated monthly using	⊠Continuous  ☐Intermiffent
[25 Pa. Code §127.441]		(a) The total Volatile Organic Compounds (VOC) emissions for	approved emission	
(Operating permit		the Polypropylene Plant Number 1 shall be less than 37.10 tons per year on a twelve (12) month rolling basis.	A 12-month rolling sum is determined and compared	
conditions.)			month rolling sum	
		(b) The polypropylene Plant Nu	emission limit.	
POLYPROPYLENE MFG SOURCES	Section D - I. Restrictions - Control Device	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	Facility has work practices and procedures in place in	Continuous
[40 CFR Part 60	Restriction(s)		accordance with	⊠Intermittent
Standards of		(a) As per 40 C.F.R. §§60.18(c), and 60.562-1(a)(1)(i)(C), the	as specified by individual	
New Stationary		n the process	terms and conditions of	
Sources §40 CFR		ist late that is:	practices include a	
60.562-1]			process for review and	
(Standards: Process		(1) operated with no vi	correction of deviations	
emissions.)			and visible emission	
			inspections" and the	
			racility's total event	

Citation	Permit	Terms & Conditions Contained		Fage 25
	S contract of the contract of		Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms &
				Conditions was:
			where the indication from	
			instruments was showing	
			failure. During this period	
			the facility was	
			experiencing a process	
			upset with a vent recovery	
			compressor while also	
			experiencing high wind	
			gusts. All other flare	
			operating requirements	
			were in the normal	
			operating range. Flare	
			instrumentation and	
			callibrated and mark	
			on an established	
			frequency. The emissions	
			generated during this	
			duration will be included in	
			the facility's emission	
			inventory report.	
50			Flare exit velocity is	
			measured using a	
			Facility records are	
			maintained for the net	
			heating value and the exit	
			chosen to comply with the	
			vent streams from	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK MFG SOURCES POLYPROPYLENE Performance for Standards of 102A - PLANT 1 procedures.) (Test methods and 60.564] Sources §40 CFR New Stationary [40 CFR Part 60 §127.441] MFG SOURCES POLYPROPYLENE 102A - PLANT 1 conditions. terms and (Operating permit [25 Pa. Code Standards of MFG SOURCES POLYPROPYLENE 102A - PLANT 1 [40 CFR Part 60 Citation Testing Requirements Section D - II. Monitoring Section D - III. Requirements Requirements Monitoring Section D - III. Section Permit §60.564, except as provided under 40 C.F.R. §60.8(b) or other methods and procedures specified in 40 C.F.R. procedures the test methods in appendix A of 40 C.F.R. Part 60 §60.8, the permittee shall use as reference methods and (a) In conducting the performance tests required in 40 C.F.R. a monthly basis. 25 Pa. Code § 127.511] [Additional authority for this permit condition is also derived from (a) The permittee shall monitor the polypropylene production on monthly basis and 12 month rolling sum, using DEP approved 25 Pa. Code § 127.511] [Additional authority for this permit condition is also derived from methods (b) The permittee shall calculate the VOC emissions on a (1) W... (a) As per 40 C.F.R. §60.563(a)(2) and (3), the permittee shall Terms & Conditions Contained in the Permit bypassing the flare. source required under 40 compliance review period compliance review period. certification during this not amenable to thus this requirement is CFR 60.8 during this performance tests for this There were no require an additional the process which would No changes were made in summation of production is 12-month rolling this review period performance test during tracked monthly. of VOC emissions is tracked monthly. 12-Means of Determining month rolling summation The thermocouples on the and flare flame detector presence of a pilot flame flare monitoring for the were installed, calibrated maintained, and operated Compliance Status ☐Intermittent Conditions was: □Intermittent with Terms & Compliance \_Intermittent

)	[25 §127	POI MFC			rec	(M 60 8	ام ج	,		
(Operating permit terms and conditions.)	[25 Pa. Code §127.441]	102A - PLANT 1 POLYPROPYLENE MFG SOURCES			requirements.)	Sources §40 CFR 60.563]	Performance for			Citation
		Section D - IV. Recordkeeping Requirements							Section	Permit
(a) the monthly polypropylene production.	The permittee shall keep records of	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]				specifications the monitoring systems as follows:  (1) A flame monitoring device t	calibrate, maintain, and operate according to manufactural	in the Permit	Dallia	Terms & Conditions Contained
. Solved Holliny.	tracked monthly. 12- month rolling summation of VOC emissions is tracked monthly	12-month rolling summation of production is	Braskem America, Inc. has chosen to comply with the car seal option. A monthly car seal inspection program is in place.	Flare is part of the operator surveillance program and is inspected and maintained as part of plant turnaround work practices.	Thermocouples on the flare to monitor for the presence of a pilot flame and flare flame detector were installed and are monitored.	according to manufacturer's specifications and/or good engineering practices.		Compliance Status	Means of Determining	
	□Intermittent	⊠Continuous					Conditions was:	with Terms &	Compliance	Hage 2/

	(a) Statement of law that			
	lacility city is			
	facility environmental files			
	are maintained in the			
	Performance test results			
	Change records.			
	facility's Management of			
	documented within the			
	recovery equipment, are			
	addition of product			
	replacement, removal or			
	type, or of any			
	feedstock type, or catalyst			
	production capacity,			
	Changes such as			
	test.			
	during the performance			
	operating continuously			
	Control device was			requirements.)
	the pilot flame is absent.			recordkeeping
	of operations during which			(Reporting and
	and records of all periods			60.565]
	records of the pilot flame			Sources 940 CFR
	determinations; continuous	the following		New Stationary
	and exit velocity	measured during each flare performance test, and shall include		Performance for
	flow rate measurements,			Standards of
	content determinations,	(a) As per 40 C.F.R. §60.565(a)(3), the permittee shall keep an		[40 CFR Part 60
	emission readings, heat			3
	(4/9/2002): All visible		Requirements	MFG SOURCES
Intermitent	performance test	25 Pa. Code § 127.311]	Recordkeeping	POLYPROPYLENE
1	available in the	0	Section D - IV.	102A - PLANT 1
⊠Continuous	The following records are	radiational authority for this permit condition is also derived from		
		rolling sum.		
		(h) the VOC emissions calculated monthly and 12-month		
Conditions was:	Compliance Status	in the Permit	Section	35.00000F H
i I		lerms & conditions contained	Permit	Citation Permit

Citation	Permit	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			imposes no compliance obligations and are thus not amenable to certification.	
102A - PLANT 1 POLYPROPYLENE MFG SOURCES [40 CFR Part 60]	Section D - V. Reporting Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]	Facility has submitted semiannual reports required under this condition.	⊠Continuous □Intermittent
Standards of Performance for New Stationary Sources §40 CFR		The permittee shall submit to the Administrator semiannual reports of the following recorded information.		
(Reporting and recordkeeping requirements.)		(a) All periods recorded under 40 C.F.R. §60.565(b) when the vent stream has been diverted from the		
102A - PLANT 1 POLYPROPYLENE MFG SOURCES	Section D - VII. Additional Requirements	Emergency vent streams, as defined in 40 C.F.R. 60.561, are exempt from the requirements of 40 C.F.R. 60.562-1(a)(2) as per 40 C.F.R. 60.560(h).	Statement of law that imposes no compliance obligations and is thus not	⊠Continuous □Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560]			amenable to certification.	
(Applicability and designation of affected facilities.)				
102B - PLANT 2 POLYPROPYLENE	Section D - I. Restrictions -	[Additional authority for this permit condition is also derived from	VOC and PM emissions for the 102B sources are	⊠Continuous

23-00012 - BRASKEM AMER INC/MARCUS HOOK	R INC/MARCUS HOOK	Tomo & Conditions Contained	Means of Determining	Compliance
Citation	Section	in the Permit	Compliance Status	with Terms & Conditions was:
MFG SOURCES [25 Pa. Code §127.441] (Operating permit	Emission Restriction(s)	25 Pa. Code § 127.512(h).]  (a) The combined Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No.2 shall not exceed	calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 24.3 ton and	☐Intermittent
conditions.)		(b) The combined Particulate Matt	2.1 ton per 12 month rolling sum emission limit.	
102B - PLANT 2 POLYPROPYLENE MFG SOURCES	Section D - I. Restrictions - Throughput Restriction(s)	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	Production is tracked monthly, a 12-month rolling sum production rate is calculated and	⊠Continuous □Intermittent
[25 Pa. Code §127.441] (Operating permit terms and conditions.)		The production rate of Polypropylene Plant Number 2 is limited to a maximum of 240,900 tons of polypropylene per year on a twelve (12) month rolling basis.	compared to the production limit.	
102B - PLANT 2 POLYPROPYLENE MFG SOURCES	Section D - I. Restrictions - Control Device Efficiency	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	Facility has work practices and procedures in place in accordance with applicable regulatory and	□Continuous ⊠Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.562-1]	Restriction(s)	(a) As per 40 C.F.R. §§60.18(c), and 60.562-1(a)(1)(i)(C), the continuous and intermittent emission streams from the process shall be vented and combusted in the flare that is:	as specified by individual terms and conditions of this Permit. These practices include a process for review and correction of deviations	8
(Standards: Process emissions.)		(1) operated with no vi	reported via routine "odor and visible emission inspections" and the facility's total event	

Oltation	Fermit	Terme & Conditions Continue		
	Section		Means of Determining	Compliance
	Cector	in the Permit	Compliance Status	with Terms &
				Conditions was:
			reporting process.	
			Thermocouples on the	
			flare to monitor for the	
			presence of a pilot flame	
			and flare flame detector	
			were installed and are	
			monitored. Process	
			control systems in place	
			ulat both alarm and	
			pilots as needed.	
			Performed weekly	
			observations (modified	
			Method 22) using "Odor	
			and Fugitive Emissions"	
			inspection form submitted	
			4/16/2009. Additionally	
			at the flare, an automated	
			system is in place to	
			measure the propensity of	
			add steam to milicate	
			smoking.	
			1 0	
			The facility measures flare	
			gas analyzer.	
			On June 30 2015 from	
			approximately 1:37 pm to	
			2:25 pm there were	
			isolated durations totaling	
			approximately six minutes	

1012 - BRASKEM AME	23-00012 - BRASKEM AMER INC/MARCUS HOOK	- O Caralitions Contained	Means of Determining	Compliance
Citation	Permit	lerms & Conditions Contained	Compliance Status	with Terms &
	Section	in the Permit		Conditions was:
			where the indication from	
			all three flare pilot	
			instruments was showing	
			failure. During this period	
			the facility was	
			experiencing a process	
			upset with a vent recovery	
			compressor while also	
			experiencing high wind	
			gusts. All other flare	
			operating requirements	
			were in the normal	
			operating range. Flare	
			instrumentation and	
			alarms continue to be	
			calibrated and monitored	
			on an established	
			frequency. The emissions	
			generated during this	
			duration will be included in	_
			the facility's emission	
			inventory report.	-
			Flare exit velocity is	
			measured using a	
			dedicated flare flow meter.	
			Facility records are	
			heating value and the exit	
			velocity.	
			Braskem America has	
	22		chosen to comply with the	Ф
			car seal option to prevent	
			vent streams from	

Page 33

		Terms & Conditions Contained	Means of Determining	
	Section		•	Compliance
		in the Permit	Compliance Status	with Terms &
				Conditions was:
	Section D - II.	(a) In conducting the performance tests required in the performance tests	bypassing the flare.	
MFG SOURCES	Lesting Requirements	§60.8, the permittee shall use as reference methods and procedures the test methods in apposition of the procedures.	There were no performance tests for this	⊠Continuous
[40 CFR Part 60		or other methods and procedures specified in 40 C.F.R. Part 60	source required under 40 CFR 60.8 during this	□Intermittent
Standards of		300.001, except as provided under 40 C.F.R. §60.8(b).	compliance review period;	
New Stationary			thus this requirement is	
Sources \$40 CFR		(1) W	not amenable to	
60.564]		1	compliance review period	
(Test methods and			No changes were made in	
procedures.)			the process which would	
			performance test during	
100R - PI ANT 2			this review period.	36
N N	Monitoring Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511]	Polypropylene production is monitored monthly.	⊠Continuous
[25 Pa. Code §127.441]		(a) The permittee shall monitor the polypropylene production	12-month rolling summation of PM and	Untermittent
(Operating permit terms and			on file.	
conditions.)		(b) The permittee shall calculate the VOC and DM and the vocations of the		
		monthly and 12 month rolling sum, using Department approved methods.		
POLYPROPYLENE N MFG SOURCES	Section D - III.  Monitoring  Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]	The thermocouples on the flare monitoring for the	⊠Continuous .
[40 CFR Part 60			presence of a pilot flame and flare flame detector	Intermittent
Canada		(a) As per 40 C.F.K. §60.563(a)(2) and (3), the permittee shall	were installed, calibrated, maintained, and operated	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK Performance for Sources §40 CFR **New Stationary** requirements.) (Monitoring 60.563] §127.441] POLYPROPYLENE MFG SOURCES 102B - PLANT 2 conditions.) [25 Pa. Code (Operating permit Citation Section D - IV. Recordkeeping Requirements Section Permit specifications the monitoring systems as follows: calibrate, maintain, and operate according to manufacturer's (1) A flame monitoring device t... [Additional authority for this permit condition is also derived from 25 Pa. Code §127.511] The permittee shall keep records of (a) the polypropylene production monthly. Terms & Conditions Contained in the Permit engineering practices. specifications and/or good manufacturer's according to were installed and are and flare flame detector presence of a pilot flame flare to monitor for the monitored Thermocouples on the and maintained as part of program and is inspected operator surveillance Flare is part of the plant turnaround work practices. Means of Determining chosen to comply with the Braskem America, Inc. has on file. Polypropylene production program is in place car seal inspection car seal option. A monthly summation of PM and is monitored monthly. VOC emissions are kept 12-month rolling Compliance Status Conditions was: **⊠**Continuous with Terms & ☐Intermittent Compliance

	Oitation	Permit	Terms & Conditions Contained		
		Section	· · · · · · · · · · · · · · · · · · ·	Means of Determining	Compliance
			in the Permit	Compliance Status	with Terms &
			(b) the VOC and PM emission coloridate		Conditions was:
			month rolling sum.		
	102B - PLANT 2	Section D - IV.	[Additional authority for this permit condition is also derived for	1	
- 2.2-10	MFG SOURCES	Requirements	25 Pa. Code § 127.511]	available in the	⊠Continuous
	[40 CFR Part 60			performance test	□Intermittent
	Standards of		(a) As per 40 C.F.R. 860.565(a)(3) the permittee about	emission readings host	
	Performance for		up-to-date, readily-accessible record of the following information	content determinations.	
	New Stationary		measured during each flare performance test, and shall include	flow rate measurements.	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Sources §40 CFR		the following	and exit velocity	
	00.000]			determinations; continuous	
	(Reporting and			and records of all periods	
	requirements)			of operations during which	
24				the pilot flame is absent.	
				Operating continuously	
				during the performance	
				test.	
-				Changes such as	
				production capacity,	
				type, or of any	
				replacement, removal or	
				addition of product	
			0.7	documented within the	
			72	facility's Management of	
				Change records.	
			) ~T	Performance test results	
			a d	are maintained in the	
	1155	200	17	facility environmental files.	2.000.320
Γ			(0	(d) Statement of law that	

Page 36

	detection and repair	[Additional authority for this permit condition is also derived in our	Section D - I. Restrictions -	103A - PLANT 1
57				(Applicability and designation of affected facilities.)
				[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.560]
	imposes no compliance obligations and is thus not amenable to certification.	Emergency vent streams, as defined in 40 C.F.R. 60.561, are exempt from the requirements of 40 C.F.R. 60.562-1(a)(2) as per 40 C.F.R. 60.560(h).	Section D - VII. Additional Requirements	102B - PLANT 2 POLYPROPYLENE MFG SOURCES
		(a) All periods recorded under 40 C.F.R. §60.565(b) when the vent stream has been diverted from the		60.565] (Reporting and recordkeeping requirements.)
		The permittee shall submit to the Administrator semiannual reports of the following recorded information.		[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR
⊠Continuous □Intermittent	Facility has submitted semiannual reports required under this condition.	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]	Section D - V. Reporting Requirements	102B - PLANT 2 POLYPROPYLENE MFG SOURCES
	imposes no compliance obligations and are thus not amenable to certification.			
with Terms & Conditions was:	Compliance Status	in the Permit	Section	Citation
Compilance	Means of Determining	Terms & Conditions Contained	Permit	23-00012 - BRASKEM AMER INCIMARCOS HOOR Citation Permit

(	100 SO	8 8	† (O %)	SC 52	1 10		c te C	w Z	S			_
[40 CFR Part 60 Standards of	103A - PLANT 1 FUGITIVE SOURCES	conditions.)	\$127.441] (Operating permit terms and	FUGITIVE SOURCES [25 Pa. Code	103A - PLANT 1		(Operating permit terms and conditions.)	[25 Pa. Code §127.441]	SOURCES			Citation
require items	Section D - II. Testing Requirements			Restrictions - Emission Restriction(s)	Section D - I.			Restriction(s)	Emission	0000	Section	Permit
(a) In conducting the performance tests required in §60.8, the	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(d).]		The Volatile Organic Compounds (VOC) emissions from the fugitive emission sources of Plant 1 shall not exceed 19.60 tons per year on a twelve (12) month rolling basis.	25 Pa. Code § 127.512(h).]	[Additional authority for this permit condition is all a second	(b) The polypropylene Plant Nu	(a) The total Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant Number 1 shall be less than 37.10 tons per year on a twelve (12) month rolling basis.	29 Fd. Code § 127.512(h).]	25 Do Codo 6 402 510 510	in the Permit		Terms & Conditions Contained
performance tests required under 40 CFR 60.8 during this compliance review period; thus this	There were no	calculated monthly using approved emission calculation methodologies. A 12-month rolling sum is determined and compared against the 19.6 ton 12 month rolling sum emission limit	VOC emissions for the 103A sources are	Facility has a leak detection and repair program (work practice) to limit fugitive emissions.		calculation methodologies. A 12-month rolling sum is determined and compared against the 37.1 ton 12 month rolling sum emission limit	VOC emissions for the 103A sources are calculated monthly using approved emission	program (work practice) to limit fugitive emissions.		Compliance Status	Means of Determining	
□Intermittent	⊠Continuous			⊠Continuous  ☐Intermittent					Conditions was:	with Terms &	Compliance	rage 3/

7880	G. G.			
	The facility uses a contractor to comply with the standards set forth in this requirement. The contractor follows Method 21 to determine the background level. All potential leak interfaces are traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicates by the instrument and the background level is			
	Elaborate if cal records not found			
	the standards set forth in this requirement. The contractor follows Method 21 to determine the presence of leaking sources. The contractor has work practices in place to ensure proper calibration gases are use as described in this requirement.			(Test methods and procedures.)
	during this compliance review period.  The facility uses a contractor to comply with	test methods in appendix A of 40 C.F.K. part by or other methods and procedures as specified in 40		Performance for New Stationary Sources §40 CFR 60.485]
Conditions was:	amenable to certification		Section	
with Terms &	Compliance Status	Terms & Conditions Contained	Permit	Citation Permit

			Citation
		Section	Permit
	III die Fermit	in the Bornit	Terms & Conditions Country
compared with 500 ppm for determining compliance.  For equipment that is added, engineering judgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.  Through periodic review and evaluation any components that are discovered which require to be added to the LDAR program are included in the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review	Compliance Status	Means of Determining	
	with Terms &	Compliance	Page 39

all of Continuous	or Intermittent Compliance	to to		
23-00012- BRASKEM AMER INC/MARCUS HOOK	Permit	Terms & Conditions Contained	Means of Determining	Compliance
Citation	Continu	in the Permit	Compliance Status	with Terms &
			period.	
		the state permit condition is also derived from	Polypropylene production	⊠Continuous
103A - PLANT 1	Section D - III. Monitoring	[Additional authority for this permit condition is and 25 Pa. Code § 127.511]	is monitored monthly.	□Intermittent
SOURCES	Requirements		12-month rolling	
[25 Pa. Code §127.441]		(a) The permittee shall monitor the polypropylene production on	emissions are kept on file.	
(Operating permit				
conditions.)		(b) The permittee shall calculate the VOC emissions on a monthly basis and 12 month rolling sum, using DEP approved methods.		
1034 - PI ANT 1	Section D - III.	[Additional authority for this permit condition is also derived from	VOC emissions are	
SOURCES	Requirements		summation.	
[25 Pa. Code §127.441]		(a) The permittee shall monitor the necessary parameters using procedures or criteria approved by the Department to determine		
(Operating permit terms and		the VOC emissions, monthly.		
collditions:)		condition is derived from 40 C.F.R.	Facility has work practices	
103A - PLANT 1 FUGITIVE SOURCES	Section D - III. Monitoring Requirements	[Authority for this permit condition is derived if on the Science §60.562-2(a).]	and procedures in place, including VOC monitoring reports maintained as part	□Intermittent
[40 CFR Part 60 Standards of		(a)(1) Each pump in light liquid service shall be monitored	of the facility LUAK Program.	
Performance for New Stationary Sources §40 CFR			exemption under (f) the closed vent system	
0.00				9887

	-	r	1	
	Ω	ĭ	•	
(	2	3		
4	1	,		
	ŧ	,		

	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.  (a) (1) Each valve shall be monitored monthly to detect leaks by with paragraphs (b) through (e) of 40 C.F.R. §60.485-7, except as provided in paragraphs (f),  (e) Statement of law that impose no compliance obligations and are thus not amenable to certification.  [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]  The permittee shall keep records of polypropylene production is monitored monthly.  (a) the monthly polypropylene production.
ye point of flavor of flav	The state of the s

Section D - IV. Recordkeeping Requirements  \$60.562-2(e).]  60  CFR  CFR  CFR  CPR  CPR  CPR  COPR  CO					
Section D - IV.  Record(keeping Requirements (a)(1) The permittee shall comply with the record(keeping requirements of 40 C.F.R. (a)(1) The permittee may comply with the record(keeping requirements of the sources in one record(keeping requirements of the sources in one record(keeping requirement in VOC service, as well as equipment for this permit condition is derived from 40 C.F.R.  Section D - IV.  Reporting (a) (1) The permittee shall comply with the record(keeping requirements in place, including vOC monitoring requirements for the sources in one record(keeping system if the system if the record keeping system if the requirement in vOC service, as well as equipment not in VOC service, as well as equipment not in vOC service. (a) All semiannual reports to DEP shall include the following information, summarized from the information in 40 C.F.R. program  (a) All semiannual reports to DEP shall include the following during the current period. There were no specific requirements as no specific requirements and procedures in place, including matched up paths work practices in place, including matched period and procedures in place, including the current period. In vOC service, as well as equipment on this procedure in place, including matched up paths work practices and procedures in place, including the current period. In vOC service, as well as equipment and in vOC service. Services and procedures in place, including the current period. In vOC service, and the procedures in place, including the current period. In vOC service, and procedures in place, including the current period. In vOC service, and procedures in place, including the current period. In vOC service, and procedures in place, including the current period. In vOC service, and procedures in place, including the current period. In vOC service, and procedures in place, including the current period. In vOC service, and procedures in place, including the procedures in place, including the procedures in place, including the procedures in place, including		compliance review period.	(1) Process unit identification.		(Reporting requirements.)
Section D - IV.    Section D - IV.   Recordkeeping   Requirements		There were no performance tests	on, summanzed from the finements.		New Stationary Sources §40 CFR 60.487]
Section D - IV.  Recordkeeping Requirements  (a) (1) The permittee shall comply with the recordkeeping requirements of 40 C.F.R. §60.485.  (b) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system iden  (a) (1) The permittee may comply with the recordkeeping requirements of 40 C.F.R. §60.485.  (b) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the recordkeeping		no specific requirements during the current period.	(a) All semiannual reports to DEP shall include the following		Standards of Performance for
Section D - IV. Recordkeeping Requirements  (a)(1) The permittee shall comply with the recordkeeping requirements for the sources in one recordkeeping system iden  (2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the system iden  Section D - V. Reporting Requirements  [Authority for this permit condition is derived from 40 C.F.R.  [Authority for this permit condition is deri		This is a historical	§60.562-2(e).]		SCORCES
Section D-IV. Recordkeeping Requirements  (a)(1) The permittee shall comply with the recordkeeping requirements of 40 C.F.R. §60.486.  (2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the system iden  (2) The permittee may comply with the recordkeeping system if the system iden  (2) The permittee may comply with the recordkeeping system if the sources in one recordkeeping system if the in VOC service, as well as equipment not in VOC service.	□Intermittent	semiannual reports as required by this condition	[Authority for this permit condition is derived from 40 C.F.R.	Section D - V. Reporting Requirements	Ž
Section D - IV. Recordkeeping Requirements (a)(1) The permittee shall comply with the recordkeeping requirements of 40 C.F.R. §60.486.  CFR  (2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the system iden  (2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the in VOC service, as well as equipment not in VOC service, as well as equipment not in VOC service.	⊠Continuous	Facility submitted			
Section D - IV. Recordkeeping Requirements  (a)(1) The permittee shall comply with the recordkeeping requirements of 40 C.F.R. §60.486.  (2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the records and procedures in place, including VOC monitoring requirements for the sources in one recordkeeping system if the and procedures in place, including VOC monitoring requirements for the sources in one recordkeeping system if the and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring requirements for the sources in one recordkeeping system if the and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility has wo		including marked-up P&IDs showing equipment in VOC service, as well as equipment not in VOC service.	system iden		
Section  Section D - IV. Recordkeeping Requirements §60.562-2(e).]  For requirements of 40 C.F.R. §60.486.  Compliance Status  Compliance Status  Compliance Status  This condition imposes no additional requirements than those conditions elsewhere in this Section.  Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR  Program  CFR		Facility has work practices and procedures in place,	ttee may comply with the recordkeeping s		(Recordkeeping requirements.)
Section  in the Permit  Compliance Status  In the Permit  Section D - IV. Recordkeeping Requirements  [Authority for this permit condition is derived from 40 C.F.R. elsewhere in this Section.  [Section D - IV. Recordkeeping [Authority for this permit condition is derived from 40 C.F.R. elsewhere in this Section.  Facility has work practices and procedures in place, and procedures in place,		including VOC monitoring reports maintained as part of the facility LDAR Program	(a)(1) The permittee shall comply with the recordkeeping requirements of 40 C.F.R. §60.486.		Performance for New Stationary Sources §40 CFR 60.486]
Section  in the Permit  Compliance Status  In the Permit  Section D - IV.  Recordkeeping Requirements §60.562-2(e).]  Compliance Status  This condition imposes no additional requirements than those conditions elsewhere in this Section.		Facility has work practices and procedures in place,			[40 CFR Part 60 Standards of
Section in the Permit Compliance Status  This condition imposes no	□Intermittent	additional requirements than those conditions elsewhere in this Section.	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(e).]	Recordkeeping Requirements	103A - PLANT 1 FUGITIVE SOURCES
Section in the Permit Compliance Status	⊠Continuous	This condition imposes no			
	Conditions was:	Compliance Status	in the Permit	Section	
Terms &	it Tomos 8	Medils of Determining	Terms	Permit	Citation

531	TO ZPOE OF	0 0 0 0 7 1	SE SH	T
(Standards: Closed vent systems and control devices.)	FUGITIVE SOURCES [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10]	Performance for New Stationary Sources §40 CFR 60.482-1] (Standards: General.)	103A - PLANT 1 FUGITIVE SOURCES [40 CFR Part 60 Standards of	Citation
	Practice Standards		Section D - VI. Work Practice Standards	Section
(b) As per 40 C.F.R. §60.482-10(f), except as provided in paragraphs (i) through (k) of this sec	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]  (a) Closed vent systems and control devices must comply with the respective provisions specified in 40 C.F.R. § 60.482-10.	requirements of 40 C.F.R. §§60.482-1 through 60.482-10 or §60.480(e) for all equipment.  (b) Compliance with 40 C.F.R. §§60.482-1 to 60.482-10 will be determined b	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Terms & Conditions Contained in the Permit
program and is inspected and maintained as part of plant turnaround work practices. The closed vent system is part of the facility LDAR Program.	submitted in this compliance certification or previous semi-annual deviation reports required by this permit, the flare is operated and maintained in compliance with 40 CFR 60.18. Flare is part of the operator surveillance	Program.  (c) Statement of law that imposes no compliance obligations and is thus not amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the current compliance period.	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR	Means of Determining  Compliance Status
	☐Continuous ☑Intermittent		⊠Continuous □Intermittent	Compliance with Terms & Conditions was:

Citation	23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation Permit	Terms & Conditions Contained	Means of Determining	Compliance
- "	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			integrity program were	
24,055			conducted during this	
			compliance review period.	
			The closed vent system is	
			in continuous operations	
			when emissions may be	
			vented through it.	
			On June 30, 2015 from	
			approximately 1:37 pm to	
			2:25 pm there were	
			isolated durations totaling	
			approximately six minutes	
			where the indication from	
			all three flare pilot	
			instruments was showing	
			failure. During this period	
			the facility was	
			experiencing a process	
			upset with a vent recovery	
			compressor while also	
			experiencing high wind	
			gusts. All other flare	
			operating requirements	
			were in the normal	
			operating range. Flare	
			instrumentation and	
			alarms continue to be	
			calibrated and monitored	
			on an established	
			frequency. The emissions	
			generated during this	
			duration will be included in	

Citation				Dago
	Social E	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
103A - PLANT 1	Section D - VI Work		inventory report.	
FUGITIVE	Practice Standards	[Authority for this permit condition is derived from 40 C F R	Except for compressors which are controlled by 40	⊠Continuous
[40 CFR Part 60 Standards of		§60.562-2(a).]	CFR § 60.482-10; and compressors that have no detectable emissions and	□Intermittent
Performance for New Stationary		(a) Each compressor shall be equipped with a seal costom that	are subject to 40 CFR	
Sources §40 CFR 60.482-31		includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 C E p. soc. 100 C.	compressors are either	
(Compressors)		and paragraphs (h), (i), and	fluid system that prevents	
The Colors			leakage of VOC to the atmosphere or are vented to a control decide	
			The AC compressors are operated with the barrier	
			than the compressor stuffing box pressure.	
			The barrier fluid systems are in heavy liquid service (mineral oil).	
			The barrier fluid systems are equipped with a	
		$\sum_{i} (0, i) \leq i$	will detect failure of the seal system and/or the	
	-	7 .	The barrier fluid systems	
		Tr.	to indicate failure of the	

Page 46

(Authority for this permit condition is derived from 40 C.F.R.
in the Permit
Terms & Conditions Contained

	all.	(a)(1) Each open-ended valve or line shall be equipped with a		New Stationary
DAR	of the facility LDAR			Standards of
led as part	reports maintained as part	§60.562-2(a).]		[40 CFR Part 60
practices in place,	Facility has work practices and procedures in place, including VOC monitoring	[Authority for this permit condition is derived from 40 C.F.R.	Practice Standards	FUGITIVE SOURCES
	review period.	(b) Each closed-purge	Section D - VI Work	103A - PLANT 1
ndition	based on this condition during the compliance			Sampling connection
t exempt	The facility did not exempt	C.F.R. §60.482-5.		60.482-5]
ed fluid e.	to a control device.	(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as		New Stationary Sources §40 CFR
ture and	is designed to capture and			Performance for
system	The closed purge system			[40 CFR Part 60
ped with stem.	systems are equipped with a closed purge system.	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]		SOURCES
ion	Sampling connection		Section D - VI. Work Practice Standards	103A - PLANT 1 FUGITIVE
				service.)
				devices in gas/vapor
				(Standards:
of repair.	placed on delay of repair.	and ppm above background, as determ	5.4	60.482-4]
paired	All leaks were repaired within 5 calendar days or	emissions, as indicated by an instrument reading of less than		Sources §40 CFR
	riogiam.	<ul> <li>(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable</li> </ul>		Performance for New Stationary
AR	of the facility LDAR			Standards of
ned as part	reports maintained as part			[40 CFR Part 60
nonitorina	including VOC monitoring	§60.562-2(a).]		SOURCES
	10			100
Status	Compliance Status	in the Permit	Section	
ermining	Means of Determining	lerms & Conditions Contained	GIIII	Citation
		1	Dormit	Citation

23-00012 - BRASKEM AME	23-00012 - BRASKEM AMER INC/MARCUS HOOK	Torms & Conditions Contained	Means of Determining	Compliance
Citation	Section	in the Permit	Compliance Status	with Terms &
	1			COIIUIIIOIIS WAS.
Sources §40 CFR 60.482-61		cap, blind flange, plug, or a second valve, except as provided in 40 C.F.R. §60.482-1(c) and paragraphs (d) and (e) of 40 C.F.R.		
(Standards: Open-		§60.482-6.		
ended valves or				
lines.)		(2) The cap, blin		
103A - PLANT 1 FUGITIVE SOURCES	Section D - VI. Work Practice Standards	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	⊠Continuous  ☐Intermittent
[40 CFR Part 60 Standards of		(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in	of the facility LDAR Program.	
New Stationary Sources §40 CFR 60.482-8]		heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and	All leaks were repaired within 15 calendar days or placed on delay of repair.	
(Standards: Pumps				
liquid service,				
pressure relief devices in light liquid				
or heavy liquid				
connectors.)				
103A - PLANT 1 FUGITIVE	Section D - VII. Additional		Facility has work practices and procedures in place,	Continuous
SOURCES	Requirements	[Authority for this permit condition is derived from 40 C.F.K. §60.562-2(a).]	reports maintained as part	
[40 CFR Part 60			of the facility LDAR	
Standards of			Program.	
New Stationary		(a) Delay of repair of equipment for which leaks have been	(b) Statement of law that	
Sources §40 CFR		detected will be allowed if repair within 10 days is technically	impose no compliance	

-
U
B
9
P
A
in
-

conditions.)	§127.441] (Operating terms and	SOURCES [25 Pa. Code	103B - PL	(Standards Equipment VOC.)	Sources § 60.562-2]	Stand Perfor	[40 CI	FUGITIVE		(Standi	60.482-9]			
ons.)	§127.441] (Operating permit terms and	ode S	ANT 2	(Standards: Equipment leaks of VOC.)	Sources §40 CFR 60.562-2]	Standards of Performance for New Stationary	[40 CFR Part 60	FUGITIVE		(Standards: Delay of repair.)	32-9]			CITATION
		Emission Restriction(s)	Section D - I.				on control to	Section D - VII. Additional Requirements					Section	Permit
	(a) The combined Volatile Organic Compounds (VOC) emissions from the Polypropylene Plant No.2 shall not exceed 24.30 tons per year on a twelve (12) month rolling basis.		permit condition is also derived from	(b) As per 40 C.F.R. §60.562-2(d), the permittee shall comply wit		(a) As per 40 C.F.R. §60.562-2(a), the permittee shall comply with the requirements specified in 40 C.F.R. §§60.482-1 through 60.482-10		[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]		equipment shall occur before the end	infeasible without a process unit shutdown Popolic of the	in the Permit		Terms & Conditions Contained
against the 24.3 ton and 2.1 ton 12 month rolling sum emission limit.	calculation methodologies. A 12-month rolling sum is determined and compared	103B sources are calculated monthly using approved emission		recordkeeping and reporting consistent with 40 CFR 60.485, 60.486, and 60.487.	The facility adheres to LDAR work practice for	LDAR program was instituted at startup.	no specific requirements	This is a historical	Facility has not chosen to utilize this exemption for repair during this compliance review period.	obligations and are thus not amenable to certification		Compliance Status	Means of Determining	
		⊠Continuous  ☐Intermittent				2007.00	□Intermittent	⊠Continuous			Conditions was:	with Terms &	Compliance	rage 49

23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation  Permit	R INC/MARCUS HOOK Permit	Terms & Conditions Contained	Means of Determining
Citation	Section	in the Permit	Compliance Status
			There were no
103B - PLANT 2 FUGITIVE	Section D - II. Testing	[Authority for this permit condition is delived from 10 of the \$60.562-2(d).]	performance tests required under 40 CFR 60.8 during
SOURCES	Requirements		this compliance review
[40 CFR Part 60		(a) In conducting the performance tests required in §60.8, the	period; thus this requirement is not
Standards of		permittee shall use as reference methods and procedures the	amenable to certification
Pertormance for New Stationary		test methods in appendix A of 40 C.F.R. part 60 or other	during this compliance
Sources §40 CFR		methods and procedures as specified in 40	review period.
60.485]			The facility uses a
			contractor to comply with
(Test methods and			the standards set forth in
procedures.)			this requirement. The
			contractor follows Method
			21 to determine the
			presence of leaking
			Sources. The continue
			place to ensure proper
			place to ensure proper
			as described in this
			requirement.
			The facility uses a
			contractor to comply with
			the standards set forth in
			this requirement. The
			contractor follows Method
			21 to determine the
			background level. All
			potential leak interfaces
			are traversed as close to
			the interface as possible.
			The arithmetic difference
			between the maximum
			Delweell rie ii

Citation	Permit	Terms & Conditions Contained	Moone of Determining	- age 3
7 2	Section	in the Permit	Compliance Status	with Terms 9
AX - 14 - 1			ī	Conditions was:
			concentration indicates by	
			background level is	
			compared with 500 ppm	a
			for determining	
			compliance.	
			Through periodic review	
			and evaluation any	
	5		components that are	
			discovered which require	
			to be added to the LDAR	
			program are included in	
			the LDAR database and	
			monitored. Braskem has a	
			MCC process and a	
			periodic review of	
			scheduled maintenance	
			activities to track any	
			changes to LDAR	
			components.	
			For equipment that is	
			added, engineering	
			Judgment is used to	
			When this determination	
			concludes that the piece of	
			equipment is in VOC	
			service, it is added to the	
			facility's LDAR program.	
			There were no samples	
			collected during the	
		24	and thus imposes no	
			מווע מועס, ווווטטספס ווט	

23-00012 - BRASKEM AME	23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation Permit	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			obligations during the current compliance review period.	
103B - PLANT 2 FUGITIVE SOURCES	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511]	Polypropylene production is monitored monthly.  12-month rolling	⊠Continuous  ☐Intermittent
[25 Pa. Code §127.441]		(a) The permittee shall monitor the polypropylene production monthly.	summation of VOC and PM emissions are kept on file.	
(Operating permit terms and				
conditions.)		(b) The permittee shall calculate the VOC and PM emissions monthly and 12 month rolling sum, using Department approved methods.		
103B - PLANT 2 FUGITIVE SOURCES	Section D - III. Monitoring Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511]	VOC emissions are calculated monthly, as well as the 12-month rolling summation.	⊠Continuous  ☐Intermittent
[25 Pa. Code §127.441]		The permittee shall monitor the necessary parameters using procedures or criteria approved by the Department to determine		
(Operating permit terms and conditions.)		the VOC emissions.		
103B - PLANT 2 FUGITIVE SOURCES	Section D - III. Monitoring Requirements	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	⊠Continuous  ☐Intermittent
[40 CFR Part 60 Standards of Performance for New Stationary		(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. §60.485(b), except as provided in 40 C.F.R. §60.482-1(c) and (f)	of the facility LDAR Program Facility is not claiming an exemption under this	
Sources 840 CLV				000703

		(a) the polypropylene production monthly.		conditions.)
Linemittent	12-month rolling summation of VOC and PM emissions are kept on file.	The permittee shall keep records of		[25 Pa. Code §127.441] (Operating permit
⊠Continuous	Polypropylene production is monitored monthly.	[Additional authority for this permit condition is also derived from 25 Pa. Code §127.511]	Section D - IV. Recordkeeping Requirements	FUGITIVE SOURCES
	(e) Statement of law that imposes no compliance obligations and is thus not amenable to certification.			in gas/vapor service in light liquid service.)
	All leaks were repaired within 15 calendar days or placed on delay of repair.	the methods specified in 40 C.F.R. §60.485(b) and shall comply with paragraphs (b) through (e) of 40 C.F.R. §60.482-7, except as provided in paragraphs (f),		New Stationary Sources §40 CFR 60.482-7]
	reports maintained as part of the facility LDAR Program.	(a)(1) Each valve shall be monitored.		[40 CFR Part 60 Standards of Performance for
⊠Continuous	Facility has work practices and procedures in place, including VOC monitoring	[Authority for this permit condition is derived from 40 C.F.R.	Monitoring Requirements	FUGITIVE SOURCES
	Facility is claiming an exemption (f) under the closed vent system condition for five pumps.			
	condition (d), thus this is not amenable to certification during this compliance review period.			(Standards: Pumps in light liquid service.)
conditions was:		and paragraphs (d) (e) and (f) o		60.482-2]
with Terms &	Compliance Status	in the Permit	Section	
Compliance	Means of Determining	Terms & Conditions Contained	Permit	Citation
Page 53			Downit	Citation

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK SOURCES Standards of FUGITIVE 103B - PLANT 2 60.486] Sources §40 CFR **New Stationary** Performance for [40 CFR Part 60 requirements. (Recordkeeping SOURCES FUGITIVE 103B - PLANT 2 [40 CFR Part 60 Citation Section D - IV.
Recordkeeping Requirements Reporting Section D - V. Requirements Section Permit month rolling sum. §60.562-2(e).] [Authority for this permit condition is derived from 40 C.F.R. requirements of 40 C.F.R. §60.486 system iden... requirements for the sources in one recordkeeping system if the (a)(1) The permittee shall comply with the recordkeeping (2) The permittee may comply with the recordkeeping §60.562-2(e).] [Authority for this permit condition is derived from 40 C.F.R. (b) the VOC and PM emission calculations monthly and 12 Terms & Conditions Contained in the Permit than those conditions additional requirements elsewhere in this Section. including VOC monitoring and procedures in place, Facility has work practices This condition imposes no Facility has work practices Program of the facility LDAR reports maintained as part including marked-up and procedures in place, service. equipment not in VOC in VOC service, as well as P&IDs showing equipment Means of Determining not amenable to obligations and are thus impose no compliance Statement of law that semiannual reports as compliance review period certification during this required by this condition Facility submitted This is a historical Compliance Status **⊠**Continuous Conditions was: Intermittent with Terms & ☐Intermittent Compliance

Citation	Permit	Tarme & Conditions Cont.		age SS
		on the state of th	Means of Determining	Compliance
	George	in the Permit	Compliance Status	with Terms &
Standards of			rominos de la companya de la company	
New Stationary		(a) All semiannual reports to DEP shall include the following	no specific requirements	
Sources §40 CFR		on, summarized from the information in 40	during the current period.	
60.48/]		\$60.486:	There were no	
requirements.)		(1) Process unit identification.	compliance review period.	
2 80				
		(2) For each month during the semiannual reporting perio	ě	
103B - PLANT 2 FUGITIVE SOURCES	Section D - VI. Work Practice Standards	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Facility has work practices and procedures in place,	⊠Continuous
[40 CFR Part 60			reports maintained as part	
Standards of Performance for New Stationary		(a) The permittee shall demonstrate compliance with the requirements of 40 C.F.R. §§60.482-1 through 60.482-10 or §60.480(e) for all equipment	of the facility LDAR Program.	
Sources §40 CFR 60.482-1]			(b) Statement of law that imposes no compliance	
(Standards:		(b) Compliance with 40 C.F.R. §§60.482-1 to 60.482-10 will be	amenable to certification.	
General.)		determined b	Additionally, the facility	
			for a determination of	Section 2000 pt.
			equivalency during the current compliance period.	
103B - PLANT 2	Section D - VI. Work Practice Standards		Except as reported and	
SOURCES		[Authority for this permit condition is derived from 40 C F R	_	
140 CER Part 60		§60.562-2(a).]	compliance certification or	⊠Intermittent
Standards of			deviation reports required	

Section	in the Permit	Compliance Status
Section	in the Permit	Compliance State
Performance for (a) Close	Closed vent systems and control devices must comply with	operated and maintained
0	the respective provisions specified in 40 C.F.R. § 60.482-10.	60.18. Flare is part of the
COURCES 840 CFR		operator surveillance
60.482-10]		program and is inspected
(Standards: Closed   (b) As pe	(b) As per 40 C.F.R. §60.482-10(f), except as provided in	and maintained as part of
	paragraphs (i) through (k) of this sec	plant turnaround work
control devices.)		practices. The closed vent
		system is part of the
		facility LDAR Program.
		Inspections under the
		facility's mechanical
3		integrity program were
		conducted during this
		compliance review period.
		The closed vent system is
		in continuous operations
		when emissions may be
		vented through it.
		On June 30, 2015 from
		approximately 1:37 pm to
		2:25 pm there were
		isolated durations totaling
		approximately six minutes
		where the indication from
		all three flare pilot
		instruments was showing
		failure. During this period
		the facility was
		experiencing a process
		upset with a vent recovery
		compressor while also
		experiencing high wind
		gusts. All other flare
		operating requirements

	The barrier fluid systems are in heavy liquid service (mineral oil).			
	The AC compressors are operated with the barrier fluid at a pressure greater than the compressor stuffing box pressure.			
	are subject to 40 CFR 60.482-3(i), all remaining compressors are either equipped with a barrier fluid system that prevents leakage of VOC to the atmosphere or are vented to a control device.	(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 C.F.R. §60.482-1(c) and paragraphs (h), (i), and		New Stationary Sources §40 CFR 60.482-3] (Compressors.)
⊠Continuous □Intermittent	Except for compressors which are controlled by 40 CFR § 60.482-10; and compressors that have no detectable emissions and	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Practice Standards	FUGITIVE SOURCES  [40 CFR Part 60 Standards of Performance for
	were in the normal operating range. Flare instrumentation and alarms continue to be calibrated and monitored on an established frequency. The emissions generated during this duration will be included in the facility's emission inventory report.			103B - DI ANT 3
with Terms & Conditions was:	Compliance Status	in the Permit	Section	
Complian	Means of Determining	Terms & Conditions Contained	remit	Cimici

Section														697
in the Permit														
Compliance Status	The barrier fluid systems are equipped with a sensor (low oil level) that will detect failure of the seal system and/or the barrier fluid system.	The barrier fluid systems are equipped with alarms to indicate failure of the	barrier fluid system. The criterion used to indicate failure of the seal system	(f) Statement of law that	impose no compliance obligations and are thus	not amenable to certification	Facility has work practices and procedures in place.	including VOC monitoring	of the facility LDAR Program.	The (2) Sulzer compressors (vent	recovery) are closed	system and vent to the	exempt from the	
with Terms & Conditions was:				er er			<i>o</i>							

Citation	Permit	Tauma 6 A 1111		Page 59
	0	conditions contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms &
				Conditions was:
			paragraphs (a) and (b) of this condition.	
			The facility did not exempt any compressors based on this condition during the compliance review position.	
103B - PLANT 2	Section D - VI. Work		7000	
FUGITIVE	Practice Standards		Facility has work practices	⊠Continuous
SOURCES		[Authority for this permit condition is derived from 40 C.F.R.	including VOC monitoring	Intermittent
[40 CFR Part 60		300.00c-z(a).J	reports maintained as part	
Standards of			of the facility LDAR	
Performance for	1	(a) Except during pressure releases pack and the second se	Program.	
Sources §40 CFR		in gas/vapor service shall be operated with no detectable	All leaks were repaired	
(Standards:		500 ppm above background, as determ	placed on delay of repair.	
Pressure relief				
devices in das/yanor				
service.)				
103B - PLANT 2	Section D - VI. Work			
FUGITIVE	Practice Standards	DOUGHE COLOR TO	Sampling connection	⊠Continuous
SOURCES		[Authority for this permit condition is derived from 40 C.F.R.	systems are equipped with a closed purge system	Intermittent
[40 CFR Part 60		300,000 = (a).]		
Standards of			The closed purge system	
Performance for			is designed to capture and	
New Stationary		(a) Each sampling connection system shall be equipped with a	transport the purged fluid	
Sources §40 CFR		closed-purge, closed-loop, or closed-vent system, except as	to a control device.	
60.482-5]		provided in 40 C.F.R. §60.482-1(c) and paragraph (c) of 40 C.F.R. §60.482-5.	The facility did not exempt	
(Standards:			any sampling systems	
Sampling connection			during the compliance	
			9 0 00110100	

23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation Permit	Permit Permit	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
		(h) Fach closed-purge	review period.	
systems.)		(b) Each closed-pulge		Continuous
103B - PLANT 2 FUGITIVE SOURCES	Section D - VI. Work Practice Standards	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	and procedures in place, including VOC monitoring reports maintained as part	☐Intermittent
[40 CFR Part 60 Standards of			of the facility LUAK Program.	
Performance for		(a)(1) Each open-ended valve or line shall be equipped with a	25	
New Stationary Sources §40 CFR 60.482-6]		cap, blind flange, plug, or a second valve, except as provided in 40 C.F.R. §60.482-1(c) and paragraphs (d) and (e) of 40 C.F.R. §60.482-6.		
(Standards: Open- ended valves or		(2) The cap blin		
103B - DI ANT 2	Section D - VI. Work	[Authority for this permit condition is derived from 40 C.F.R.	Facility has work practices	⊠Continuous
FUGITIVE SOURCES	Practice Standards	§60.562-2(a).]	and procedures in place, including VOC monitoring	□Intermittent
[40 CFR Part 60		( ) If wild poor of a potential leak is found by visual, audible.	of the facility LDAR	
Standards of Performance for		(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in olfactory, or any other detection method at pumps and valves in light liquid or	Program.  (b) Statement of law that	
New Stationary Sources §40 CFR		heavy liquid service, and	impose no compliance obligations and are thus	
(Standards: Pumps			not amenable to certification	
and valves in heavy liquid service,			Facility has work practices	
pressure relief devices in light liquid			including VOC monitoring	
or heavy liquid service, and			of the facility LDAR Program. All leaks were	

	U
	$\omega$
1	9
	Œ
	O
	_

not to ation	Facility has chosen not to apply for a determination of equivalency during the	wit		Equipment leaks of VOC.)
ot to g the eriod.	elect this option during the current compliance period.	(b) As per 40 C.F.R. §60.562-2(d), the permittee shall complete		Sources §40 CFR 60.562-2]
Ö.	during the current period LDAR program was instituted at startup.	(a) As per 40 C.F.R. §60.562-2(a), the permittee shall comply with the requirements specified in 40 C.F.R. §§60.482-1 through 60.482-10.		Standards of Performance for New Stationary
ses	This is a historical requirement and imposes no specific requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	Additional Requirements	FUGITIVE SOURCES
or to	Facility has not chosen to utilize this exemption for repair during this compliance review period		Option D	103R - PI ANT 2
is in	(b) Statement of law that impose no compliance obligations and are thus not amenable to certification	detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end		Sources §40 CFR 60.482-9] (Standards: Delay of repair.)
	of the facility LDAR Program.	(a) Delay of repair of equipment for which leaks have been		Performance for New Stationary
tices ice, oring	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Additional Requirements	SOURCES [40 CFR Part 60
èd	repaired within 15 calendar days or placed on delay of repair.		Section D - VII.	103B - PLANT 2
Sus	Compliance Status	III die Fermit		
ning	Means of Determining	is the Descriptions contained	Section	
		Torms 9 Conditions	Permit	CITATION

Page 62

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK 105 -PARTS WASHER §129.63] MAINTENANCE operations) (Degreasing [25 Pa. Code PARTS WASHER 105 -MAINTENANCE terms and §127.441] 105 conditions.) [25 Pa. Code (Operating permit PARTS WASHER MAINTENANCE [25 Pa. Code Citation Section D - I. Restrictions -Restriction(s) Emission Monitoring Section D - III. Requirements Section D - IV. Recordkeeping Requirements Section Permit degreaser of 1.0 millimeter of mercury (mmHg) or greater and containing greater than 5% VOC by weight, measured at 20°C (a) The permittee shall not use any solvent with a vapor (b) Paragraph (a) does not apply: (68°F) containing VOCs. monthly basis The permittee shall monitor and record the solvent usage on a The permittee shall keep records of: (i) To cold cleaning machines used in extreme cleaning ... Terms & Conditions Contained in the Permit recordkeeping and current compliance period reporting consistent with LDAR work practice for The facility adheres to 60.487. 40 CFR 60.486 and Facility maintains MSDS's adherence to the vapor demonstrates the this equipment which for the material used in pressure and VOC content requirements. Facility has Means of Determining unit with aqueous based replaced solvent based has replaced solvent maintained onsite. Facility waste manifest are based unit. based unit with aqueous Records of the MSDS and supplier. Facility provided by the material Compliance Status material used in this maintains MSDS's for the This information has been **⊠**Continuous Conditions was: □Intermittent with Terms & ∐Intermittent **⊠**Continuous Compliance **⊠**Continuous \_Intermittent

	0 0 0										_			
	§129.63] (Degreasing operations)	MAINTENANCE PARTS WASHER [25 Pa. Code	200		operations)	(Degreasing	MAINTENANCE PARTS WASHER [25 Pa. Code	105 -	conditions.)	(Operating permit	§127.441]			Citation
		Practice Standards					Recordkeeping Requirements	Section D - IV.				section	0	Permit
(ii) The type of solvent including the product or vendor identi	(i) The name and address of the solvent supplier.	A person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide, to the purchaser, the following written information:	(e) other appropriate documentation acceptable to the Department may be used to comply with 25 Pa. Code 129.63.	(d) a Material Safety Data Sheet (MSDS), or	(c) a certificate that corresponds to a number of sales.	(a) an invoice,	The permittee shall maintain records of:		(b) VOC emissions on a monthly and 12-month rolling sum basis.	(a) monthly solvent usage;	(a) Mosthic octoor	in the Permit	contained	Tarme & Candillana Carte
pressure and VOC content requirements. Facility has replaced solvent based	material used in this equipment which demonstrates the adherence to the vapor	This information has been provided by the solvent supplier. Facility maintains MSDS's for the			unit with aqueous based unit.	labeling and operating procedures. Facility has replaced solvent hased	Facility operates this equipment in accordance with these requirements through equipment	unit with aqueous based unit.	adherence to the vapor pressure and VOC content requirements. Facility has replaced solvent based	equipment which demonstrates the		Compliance Status	Means of Determining	
		⊠Continuous □Intermittent					⊠Continuous □Intermittent				Conditions was:	with Terms &	Compliance	rage 63

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK PARTS WASHER §129.63] MAINTENANCE 105 -PROCESS & operations) (Degreasing [25 Pa. Code SPLITTER CAVERN 4 106 - PROPYLENE **New Stationary** Performance for Standards of (Standards: Process 60.562-1] Sources §40 CFR [40 CFR Part 60 emissions. Citation Practice Standards Section D - VI. Work Section D - I. Control Device Restrictions -Efficiency Restriction(s) Section Permit ratio of 0.50 or greater. cold cleaning machines shall: operating requirements in paragraph (3). In addit... emissions from this source shall be directed to Sunoco Flare (b) A... 40 C.F.R. §§60.562-1(a)(1)(i)(C) and 60.482-10(d). requirements specified in 40 C.F.R. §60.18 at all times, as per (Source ID C100) that shall be operated in compliance with the (a) As per 40 C.F.R. §60.562-1(a) and (d), vent stream (1) Immersion cold cleaning machines shall have a freeboard (2) Immersion cold cleaning machines and remote reservoir (i) Have a permanent, conspicuous label summarizing the Terms & Conditions Contained in the Permit Facility operates this unit with aqueous based with these requirements equipment in accordance through equipment unit with aqueous based replaced solvent based procedures. Facility has labeling and operating Source emissions were device during this period directed to this control SXL flare was operating in instrumentation. Braskem as evidenced by facility Means of Determining accordance with these has confirmed that the reporting period. requirements during this Braskem program did not sources, a separate flare associated with these not own or operate the Although Braskem does either the open or closed exist to car seal valves in position, for the entire document that no potential review period, to Compliance Status □Intermittent Conditions was: ☐Continuous ⊠Intermittent with Terms & Compliance

Citation	Permit	Terms & Conditions Contained		Lage oo
	0		Weans of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			flare bypasses occurred.	
106 - PROPYLENE SPLITTER PROCESS &	Section D - II. Testing Requirements	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(d).]	There were no performance tests required under 40 CFR 60 8 during	⊠Continuous
[40 CFR Part 60 Standards of		(a) In conducting the performance tests required in §60.8, the permittee shall use as reference methods and procedures the	this compliance review period; thus this requirement is not	
Performance for New Stationary Sources §40 CFR		test methods in appendix A of 40 C.F.R. part 60 or other methods and procedures as specified in 40	amenable to certification during this compliance review period.	
(Test methods and procedures.)			contractor to comply with the standards set forth in this requirement. The	
-3			contractor follows Method 21 to determine the presence of leaking	
			sources. The contractor has work practices in	
			place to ensure proper calibration gases are use	
10 10			requirement. The facility uses a	s.
			contractor to comply with the standards set forth in	
			this requirement. The	
			contractor follows Method	1
			21 to determine the	
			potential leak interfaces	

Citation Permit	Permit	Terms & Conditions Contained in the Permit	Means of Determining  Compliance Status
	Section	in the Permit	Compliance
			are traversed as close to
			the interface as possible.
			The arithmetic difference
			between the maximum
			concentration indicates by
			the instrument and the
			background level is
	***************************************		compared with 500 ppm
			for determining
			compliance.
			Through periodic review
			and evaluation any
			components that are
			discovered which require
			to be added to the LDAR
			program are included in
			the LDAR database and
			monitored. Braskem has a
			MOC process and a
			periodic review of
			scheduled maintenance
			activities to track any
			changes to LDAR
			components.
			For equipment that is
			added, engineering
			judgment is used to
			confirm the VOC content.
			When this determination
			concludes that the piece of
			equipment is in VOC
			service, it is added to the
			facility's LDAR program.

Citation	Permit	Terms & Conditions Contained	Manager	Page 67
	Section	in the Permit	or neterilling	Compliance
			compliance Status	with Terms & Conditions was:
			There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review	
106 - PROPYLENE SPLITTER PROCESS &	Section D - III. Monitoring Requirements	[Additional authority for this posses:	Polypropylene production is monitored monthly	⊠Continuous
CAVERN 4 [25 Pa. Code §127.441]		25 Pa. Code § 127.511]	12-month rolling summation of VOC emissions are kent on file	□Intermittent
(Operating permit terms and conditions.)		<ul> <li>a. The permittee shall monitor and record the polypropylene production on a monthly basis.</li> </ul>		
		<ul> <li>The permittee shall calculate the VOC emissions on a monthly basis and 12-month rolling sum, using Department a</li> </ul>		
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - III. Monitoring Requirements	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Facility has work practices and procedures in place, including VOC monitoring	⊠Continuous
[40 CFR Part 60 Standards of Performance for		(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R.	reports maintained as part of the facility LDAR Program	
New Stationary Sources §40 CFR 60.482-2]		and paragraphs (d), (e), and (f) o	Facility is not claiming an exemption under this condition (d), thus this is	
(Standards: Pumps in light liquid			compliance review period.	

Page 68

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INCIMARCUS HOOK PROCESS & SPLITTER 106 - PROPYLENE service. CAVERN 4 Performance for Standards of [40 CFR Part 60 in light liquid 60.482-7] Sources §40 CFR **New Stationary** service.) in gas/vapor service (Standards: Valves SPLITTER 106 - PROPYLENE PROCESS & Citation Section D - III. Requirements Monitoring Section D - IV. Requirements Recordkeeping Section Permit §60.562-2(a).] with paragraphs (b) through (e) of 40 C.F.R. §60.482-7, except the methods specified in 40 C.F.R. §60.485(b) and shall comply [Authority for this permit condition is derived from 40 C.F.R. as provided in paragraphs (f),... (a)(1) Each valve shall be monitored monthly to detect leaks by [Additional authority for this permit condition is also derived from Terms & Conditions Contained in the Permit including VOC monitoring and procedures in place, Facility has work practices of the facility LDAR Program. reports maintained as part placed on delay of repair. within 15 calendar days or All leaks were repaired amenable to certification. obligations and is thus not imposes no compliance (e) Statement of law that program are included in to be added to the LDAR discovered which require components that are and evaluation any Through periodic review Means of Determining the LDAR database and periodic review of MOC process and a monitored. Braskem has a activities to track any scheduled maintenance components. changes to LDAR is monitored monthly. Polypropylene production **Compliance Status** 12-month rolling Conditions was: Intermittent with Terms & Compliance **⊠**Continuous ∐Intermittent

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK

Citation Permit

-
U
B
9
O
O
20
w

	obligations and are thus			
	Statement of law that impose no compliance			
	including marked-up P&IDs showing equipment in VOC service, as well as equipment not in VOC service.			
	Facility has work practices and procedures in place	(2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the system iden		(Recordkeeping requirements.)
	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR	(a)(1) The permittee shall comply with the recordkeeping requirements of 40 C.F.R. §60.486.		Standards of Performance for New Stationary Sources §40 CFR 60.486]
⊠Continuous ☐Intermittent	This condition imposes no additional requirements than those conditions elsewhere in this Section.	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(e).]	Recordkeeping Requirements	SPLITTER PROCESS & CAVERN 4 [40 CFR Part 60
		b. The VOC emissions on a monthly basis and 12-month rolling sum.	Section D - IV.	106 - PROPYLENE
		a. The polypropylene production on a monthly basis		conditions.)
		The permittee shall keep records of		(Operating permit terms and
	summation of VOC emissions are kept on file.			[25 Pa. Code §127.441]
Conditions was:		25 Pa. Code § 127 5111		CAVERN 4
with Terms &	Compliance Status	in the Permit		
Compliance	Means of Determining	Dalle	Section	
Page 69		Terms & Conditions Contained	Permit	Citation

Citation Permit
106 - PROPYLENE Section D - IV. SPLITTER Recordkeeping PROCESS & Requirements CAVERN 4
[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.565]
(Reporting and recordkeeping requirements.)
106 - PROPYLENE Section D - V.  SPLITTER Reporting Requirements
CAVERN 4  [40 CFR Part 60  Standards of  Performance for
New Stationary Sources §40 CFR 60.487]
(Reporting requirements.)

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INCIMARCUS HOOK
Citation Permit

Page				
age		-		1
ge	N	Ω	ŭ	
		5	2	
~1		_	١,	
7			Z	

Section  (2) For each month during the semiannual reporting perio  The permittee shall submit to DEP semiannual reports of all periods recorded under 40 C.F.R. §60.565(b) when the vent stream has been diverted from the flare.  Section D - VI. Work Practice Standards  (a) The permittee shall demonstrate compliance with the requirements of 40 C.F.R. §60.482-1 through 60.482-10 or §60.480(e) for all equipment.  (b) Compliance with 40 C.F.R. §560.482-1 to 60.482-10 will be determined b  (b) Compliance with 40 C.F.R. §560.482-1 to 60.482-10 will be determined b	⊠Continuous	Except as reported and submitted in Sunoco's		Practice Standards	SPLITTER
Section D - V.  The permittee shall submit to DEP semiannual reporting perio  The permittee shall submit to DEP semiannual reports of all periods recorded under 40 C.F.R. §50.565(b) when the vent stonary stream has been diverted from the flare.  Part 60 g and eping ents.)  OPYLENE  Section D - VI. Work R Practice Standards  S & Practice Standards  S & Practice Standards  S & Sof nee for onary 40 C.F.R. §50.482-10 the requirements of 40 C.F.R. §50.482-10 or onary 40 C.F.R. §50.482-10 or onary 50 Committee shall equipment.		amenable to certification. Additionally, the facility has chosen not to apply for a determination of equivalency during the current compliance period	determined b		(Standards: General.)
Section D - V. Reporting Requirements  (2) For each month during the semiannual reporting perio  The permittee shall submit to DEP semiannual reports of all periods recorded under 40 C.F.R. \$60.565(b) when the vent stream has been diverted from the flare.  O  Resolve the semiannual reports of all stream has been diverted from the flare.  INE Section D - VI. Work Practice Standards  \$60.562-2(a).]  (a) The permittee shall demonstrate compliance with the requirements of 40 C.F.R. \$\$60.482-1 through 60.482-10 or \$\$60.482-10 or \$\$80.482-10 o		(c) Statement of law that imposes no compliance obligations and is thus not	(b) Compliance with 40 C E B 8860 400 4 4 50 40		New Stationary Sources §40 CFR 60.482-1]
Section D - V.  PYLENE Reporting Requirements  (2) For each month during the semiannual reporting perio  The permittee shall submit to DEP semiannual reports of all periods recorded under 40 C.F.R. §60.565(b) when the vent stream has been diverted from the flare.  and and and ining lts.)  YLENE Section D - VI. Work Practice Standards  [Authority for this permit condition is derived from 40 C.F.R. in the flare in the permit stream is permit condition in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit condition is derived from 40 C.F.R. in the permit semiannual reporting perio  [Authority for this permit semiannual reporting perio  [Authority for this permit semiannual reporting perio  [Authority for this permit semiannual reporting period  [Authority for this permit semiannual reporting period  [Authority for		reports maintained as part of the facility LDAR Program.	nstrate compliance wit \$60.482-1 through 60.4		[40 CFR Part 60 Standards of Performance for
ROPYLENE Section D - V. ER Reporting Reporting Requirements N 4  Requirements N 4  Requirements Section D - V. The permittee shall submit to DEP semiannual reports of all periods recorded under 40 C.F.R. §60.565(b) when the vent stream has been diverted from the flare.  Stream has been diverted from the flare.		Facility has work practices and procedures in place, including VOC monitoring	his permit condition is derived from 4	Section D - VI. Work Practice Standards	SPLITTER PROCESS & CAVERN 4
ROPYLENE  Section D - V.  Reporting Reporting Requirements					(Reporting and recordkeeping requirements.)
in the Permit  (2) For each month during the semiannual reporting perio  Reporting Requirements  Requirements  in the Permit  (2) For each month during the semiannual reporting perio  The permittee shall submit to DEP semiannual reports of all periods recorded under 40 C.F.R. §60.565(b) when the vent stream has been diverted from the flare.		this reporting period.			Standards of Performance for New Stationary Sources §40 CFR 60.565]
Section D. V. The Section D. V		Braskem has submitted the applicable information in the semi-annual reports. No vent streams were	periods recorded under 40 C.F.R. §60.565(b) when the vent stream has been diverted from the flare.	Reporting Requirements	SPLITTER PROCESS & CAVERN 4
in the Permit	- 1			Section D - V	106 - PROPYLENE
in the Permit		Compliance Status			
		weans of Determining	in the Permit	Section	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK **CAVERN 4** Standards of [40 CFR Part 60 PROCESS & Performance for Sources §40 CFR **New Stationary** vent systems and 60.482-10] control devices.) (Standards: Closed PROCESS & SPLITTER 106 - PROPYLENE Performance for CAVERN 4 60.482-3] Sources §40 CFR **New Stationary** Standards of [40 CFR Part 60 (Compressors.) Citation Section D - VI. Work Practice Standards Section Permit §60.562-2(a). [Authority for this permit condition is derived from 40 C.F.R. the respective provisions specified in 40 C.F.R. § 60.482-10. (a) Closed vent systems and control devices must comply with paragraphs (i) through (k) of this sec... (b) As per 40 C.F.R. §60.482-10(f), except as provided in §60.562-2(a). [Authority for this permit condition is derived from 40 C.F.R. to the atmosphere, except as provided in 40 C.F.R. §60.482-1(c) includes a barrier fluid system and that prevents leakage of VOC (a) Each compressor shall be equipped with a seal system that and paragraphs (h), (i), and ... Terms & Conditions Contained in the Permit previous semi-annual compliance certification or and maintained in deviation reports, the system is part of the 60.18. The closed vent compliance with 40 CFR Sunoco flare is operated conducted during this integrity program were facility's mechanical facility LDAR Program compliance review period Inspections under the when emissions may be in continuous operations Means of Determining vented through it. CFR § 60.482-10; and which are controlled by 40 The closed vent system is 60.482-3(i), all remaining compressors that have no Except for compressors compressors are either are subject to 40 CFR detectable emissions and equipped with a barrier to a control device. atmosphere or are vented fluid system that prevents (f) Statement of law that leakage of VOC to the obligations and are thus impose no compliance Compliance Status ∐Intermittent Conditions was: ☐Intermittent □ Continuous with Terms & Compliance

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INCIMARCUS HOOK
Citation Permit

Page 73

Citation	Permit	T 00		Page 73
	Section	erms & Conditions Contained	Means of Determining	Compliance
1		in the Permit	Compliance Status	with Terms & Conditions was:
			not amenable to certification	
			Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.	
			The facility did not exempt any compressors based on this condition during the compliance review period	
SPLITTER PROCESS & CAVERN 4	Section D - VI. Work Practice Standards	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Facility has work practices and procedures in place, including VOC monitoring	⊠Continuous  ☐Intermittent
[40 CFR Part 60 Standards of Performance for		(a) Except during pressure releases, each pressure relief dovice	reports maintained as part of the facility LDAR Program.	
New Stationary Sources §40 CFR 60.482-4]		in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determ	All leaks were repaired within 5 calendar days or placed on delay of repair.	
(Standards: Pressure relief devices in gas/vapor service.)				
106 - PROPYLENE SPLITTER PROCESS & CAVERN 4	Section D - VI. Work Practice Standards	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	<u> </u>	⊠Continuous □Intermittent
			The closed purge system	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK Standards of [40 CFR Part 60 60.482-5] Sources §40 CFR **New Stationary** Performance for systems.) Sampling connection (Standards: **CAVERN 4** PROCESS & SPLITTER lines.) 60.482-6] Performance for Standards of [40 CFR Part 60 106 - PROPYLENE Sources §40 CFR **New Stationary** ended valves or (Standards: Open-SPLITTER Performance for Standards of **CAVERN 4** PROCESS & 106 - PROPYLENE **New Stationary** [40 CFR Part 60 Citation Section D - VI. Work Practice Standards Section D - VI. Work Practice Standards Section Permit provided in 40 C.F.R. §60.482-1(c) and paragraph (c) of 40 closed-purge, closed-loop, or closed-vent system, except as C.F.R. §60.482-5. (a) Each sampling connection system shall be equipped with a §60.562-2(a).] [Authority for this permit condition is derived from 40 C.F.R. (b) Each closed-purge... §60.482-6 cap, blind flange, plug, or a second valve, except as provided in 40 C.F.R. §60.482-1(c) and paragraphs (d) and (e) of 40 C.F.R. (a)(1) Each open-ended valve or line shall be equipped with a [Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).] (2) The cap, blin... heavy liquid service, and ... heavy liquid service, pressure relief devices in light liquid or olfactory, or any other detection method at pumps and valves in (a) If evidence of a potential leak is found by visual, audible, Terms & Conditions Contained in the Permit is designed to capture and any sampling systems to a control device. transport the purged fluid during the compliance based on this condition The facility did not exempt including VOC monitoring and procedures in place, Facility has work practices review period. of the facility LDAR reports maintained as part Program. Means of Determining identified from open-ended One missing cap was discovery of open-ended immediately replaced upon line. This missing cap was and procedures in place, Facility has work practices including VOC monitoring reports maintained as part within 15 calendar days or All leaks were repaired Program. of the facility LDAR Compliance Status Conditions was: ⊠Intermittent Continuous with Terms & ∐Intermittent Compliance

Sources §40 CFR

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK
Citation Permit

Page 75

refills & Conditions Contained	Means of Determining	,
	(	Compliance
in the Permit	Compliance Status	with Terms &
		Conditions was:
	placed on delay of repair.	
	157	
The source consists the following equipment and associated		
vent emissions:	Statement of law that imposes no compliance obligations and is thus not	⊠Continuous  ☐Intermittent
Two (2) splitters and associated pre-treatment and post-treatment equipment	amenable to certification.	
Cavern #A		
Three (3) propylene dryers (V-54A, V54-B, and V-54C)		
	Facility has work practices	
[Authority for this permit condition is derived from 40 C.F.R. i	and procedures in place, including VOC monitoring	☐Intermittent
	of the facility LDAR	
(a) Delay of repair of equipment for which looks have	Program.	
₹	(b) Statement of law that	
SIUI	obligations and are thus	
0	not amenable to certification	
T	acility has not chosen to	
O.D.	F	Facility has not chosen to

23-00012 - BRASKEM AMER INCIMARCUS HOOK Citation Permit	R INC/MARCUS HOOK  Permit	Terms & Conditions Contained	Means of Determining
Citation	Section	in the Permit	Compliance Status
			utilize this exemption for
repair.)			repair during this compliance review period.
DROCESS &	Section D - VII. Additional Requirements	[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).]	This is a historical requirement and imposes no specific requirements during the current period.
CAVERN 4  [40 CFR Part 60  Standards of Performance for New Stationary		(a) As per 40 C.F.R. §60.562-2(a), the permittee shall comply with the requirements specified in 40 C.F.R. §§60.482-1 through 60.482-10.	LDAR program was instituted at startup.  Facility has chosen not to elect this option during the current compliance period.
Sources §40 CFR 60.562-2] (Standards: Equipment leaks of		(b) As per 40 C.F.R. §60.562-2(d), the permittee shall comply wit	Facility has chosen not to apply for a determination of equivalency during the current compliance period.
Voc.)			The facility adheres to LDAR work practice for recordkeeping and reporting consistent with 40 CFR 60.486 and 60.487.
107 - PROPYLENE UNLOADING RACK	Section D - I. Restrictions - Control Device Efficiency	When the loading of rail cars with propylene occurs at this source, the air emissions shall be routed to a flare that meets the requirements of 40 CFR §60.18.	Source emissions were directed to this control device during this period as evidenced by facility
(Operating permit terms and conditions.)			

Citation	Permit	Terme & Conditions Contains		rage //
	0	ontained a contained	Means of Determining	Compliance
4	Occupii	in the Permit	Compliance Status	with Terms &
107 - PROPYLENE	Section D - I.	(a) As per 40 C.F.R. §60.562-1(a) and (d), vent stream	O C C C C C C C C C C C C C C C C C C C	Was.
070707	Control Device	emissions from this source shall be directed to Sunoco Flare	directed to this control	Continuous
[40 CFR Part 60	Efficiency	requirements specified in 10 0 F p. 200 10	device during this period	⊠Intermittent
Standards of	Restriction(s)	40 C.F.R. \$860,562-1/a)/17/3/O. and 60 to 120 to 130 mes, as per	as evidenced by facility	
Performance for		.5 c 3350.502-1(a)(1)(l)(C) and 60.482-10(d).	instrumentation. Braskem	
New Stationary	5-0-0-5		has confirmed that the	
Sources §40 CFR			SXL flare was operating in	
00.302-1]		(b) A	accordance with these	
(Standards: Process			requirements during this	
emissions.)			י ייניים איניים	
			Although Braskem does not own or operate the	
			flare associated with these	
			Braskem program did not	
7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			exist to car seal valves in	
			either the open or closed	
			position, for the entire	
			reporting period, to	
			flare bypasses occurred	
UNI OADING RACK	Section D - II. Testing	his permit condition is derived from 40 C.F.R.	There were no	
	Requirements	800:30z-z(u).]		Collegiandons
[40 CFR Part 60		V	under 40 CFR 60.8 during	□Intermittent
Standards of			this compliance review	
New Stationary			period; thus this	47
Sources SAO CED		s the	requirement is not	
60 485]		60 or other	amenable to certification	
		rical and procedures as specified in 40	review period	
(Test methods and				
procedures.)			The facility uses a	
			contractor to comply with	
			the standards set forth in	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK  Citation Permit									-																									
HOOK Terms & Conditions Contained	n in the Permit												95																					sectio
Means of Determining	Compliance Status	this requirement. The	contractor follows Method	21 to determine the	presence of leaking	sources. The contractor	has work practices in	place to ensure proper	calibration gases are use	as described in this	requirement.	The facility uses a	contractor to comply with	the standards set forth in	this requirement. The	contractor follows Method	21 to determine the	background level. All	potential leak interfaces	are traversed as close to	the interface as possible.	The arithmetic difference	between the maximum	concentration indicates by	background level is	compared with 500 ppm	for determining	compliance.	compliance. Through periodic review	compliance.  Through periodic review and evaluation any	compliance.  Through periodic review and evaluation any components that are	Through periodic review and evaluation any components that are discovered which require	Through periodic review and evaluation any components that are discovered which require to be added to the LDAR	
Compliance	with Terms & Conditions was:																															, to	<i>X</i> (v	in the Permit

Certification of Continuous or Intermittent Compliance
23-00012 - BRASKEM AMER INC/MARCUS HOOK
Citation Permit

Page 79

S to C € 12 C	2	1-			
UNLOADING RACK [25 Pa. Code §127.441] (Operating permit terms and conditions.)	107 - PROPYLENE				Citation
Monitoring Requirements	Section D - III		Section	0	Permit
loaded and unloaded in barrels of each loading.			in the Permit	Daligned	Terms & Conditions Contained
The amount of materials loaded and unloaded are tracked in a facility tracking spreadsheet.	the LDAR database and monitored. Braskem has a MOC process and a periodic review of scheduled maintenance activities to track any changes to LDAR components.  For equipment that is added, engineering judgment is used to confirm the VOC content. When this determination concludes that the piece of equipment is in VOC service, it is added to the facility's LDAR program.  There were no samples collected during the current compliance period and thus, imposes no obligations during the current compliance review period.		Compliance Status	Means of Determining	
 ⊠Continuous □Intermittent		Conditions was:	with Terms &	Compliance	Page 79

Certification of Continuous 23-00012 - BRASKEM AME	Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK		Means of Determining	Compliance
Citation	Permit	in the Permit	Compliance Status	with Terms &
				Continuous
107 - PROPYLENE UNLOADING RACK	Section D - III. Monitoring Requirements	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part	⊠Continuous  ☐Intermittent
Standards of Performance for New Stationary Sources §40 CFR 60.482-2]		(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. §60.485(b), except as provided in 40 C.F.R. §60.482-1(c) and (f) and paragraphs (d), (e), and (f) o	of the facility LDAR Program.	
(Standards: Pumps in light liquid service.)			gi Si	
107 - PROPYLENE UNLOADING RACK	Section D - III. Monitoring Requirements	[Authority for this permit condition is derived from 40 C.F.R.	Facility has work practices and procedures in place, including VOC monitoring	
[40 CFR Part 60 Standards of Performance for	,	§60.562-2(a).]	of the facility LDAR Program.	
New Stationary Sources §40 CFR 60.482-7]		(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. §60.485(b) and shall comply with paragraphs (b) through (e) of 40 C.F.R. §60.482-7, except	Through periodic review and evaluation any components that are	
(Standards: Valves in gas/vapor service in light liquid service.)		as provided in paragraphs (I),	discovered which require to be added to the LDAR program are included in the LDAR database and monitored. Braskem has a	
			periodic review of scheduled maintenance activities to track any changes to LDAR components.	

Citation	Permit	Tarme 9 Canditians Com.		rage 81
	0000	Contained	Means of Determining	Compliance
	Cocion	in the Permit	Compliance Status	with Terms & Conditions was:
\$7	6		All leaks were repaired within 15 calendar days or placed on delay of repair.	
2 11 22			(e) Statement of law that impose no compliance obligations and are thus not amenable to certification.	
107 - PROPYLENE UNLOADING RACK	Section D - IV. Recordkeeping Requirements	The permittee shall keep the following records:	The amount of materials	⊠Continuous
[25 Pa. Code §127.441]		a. Number of loadings and unloadings on a monthly basis	tracked in a facility tracking spreadsheet.	□Intermittent
(Operating permit terms and		b. Amount of loaded and unloaded propane/propylene mixture on a monthly basis	VOC emissions for the 107 source is calculated	<u> </u>
conditions.)		<ul> <li>The emissions from the loading and unloading operations on a monthly basis and 12-month rolling sum.</li> </ul>	monthly using approved emission calculation methodologies. A 12-month rolling sum is determined.	
107 - PROPYLENE UNLOADING RACK [40 CFR Part 60 Standards of	Section D - IV. Recordkeeping Requirements	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(e).]	This condition imposes no additional requirements than those conditions elsewhere in this Section.	⊠Continuous □Intermittent
New Stationary Sources §40 CFR 60.486]		(a)(1) The permittee shall comply with the recordkeeping requirements of 40 C.F.R. §60.486.	Facility has work practices and procedures in place, including VOC monitoring	
(Recordkeeping requirements.)		(2) The permittee may comply with the recordkeeping requirements for the sources in one recordkeeping system if the	of the facility LDAR Program Facility has work practices	
			and procedures in place,	

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK **UNLOADING RACK** 107 - PROPYLENE **New Stationary** Performance for Standards of 60.565] Sources §40 CFR [40 CFR Part 60 60.487] [40 CFR Part 60 **UNLOADING RACK** recordkeeping (Reporting and Standards of requirements.) Sources §40 CFR **New Stationary** Performance for 107 - PROPYLENE Citation Recordkeeping Section D - IV. Requirements Requirements Reporting Section D - V. Section Permit system iden... (i) All periods when flow is indicated if flow indicators are divert the emission stream away from the flare: following records for vent system containing vlaves that could As per 40 C.F.R. §60.565(b)(2), the permittee shall keep the installed under 40 C.F.R. §60.563(d)(1). (ii) All times when mai... §60.562-2(e).] [Authority for this permit condition is derived from 40 C.F.R. information, summarized from the information in 40 C.F.R. (a) All semiannual reports to DEP shall include the following Terms & Conditions Contained in the Permit equipment not in VOC in VOC service, as well as P&IDs showing equipment including marked-up service certification during this not amenable to obligations and are thus impose no compliance (h) Statement of law that compliance review period either the open or closed exist to car seal valves in Braskem program did not sources, a separate not own or operate the Although Braskem does flare associated with these document that no potential reporting period, to position, for the entire Means of Determining semiannual reports as flare bypasses occurred. required by this condition during the current period no specific requirements requirement and imposes This is a historical Facility submitted There were no Compliance Status Conditions was: ⊠Intermittent \_|Continuous with Terms & ∐Intermittent Compliance

Citation	Permit	Torms 0 0 1111		Page 83
	Specifica	conditions contained	Means of Determining	Compliance
The St. Co.	00000	in the Permit	Compliance Status	with Terms &
(Reporting		\$60.486:		Conditions was:
requirements.)		(1) Process unit identification.	performance tests conducted during the compliance review period.	
		(2) For each month during the semiannual reporting perio		
UNLOADING RACK	Section D - V. Reporting	The permittee shall submit to DEP semiannual reports of all periods recorded under 40 C.F.R. 860 565/h) when the rest	Braskem has submitted	⊠Continuous
[40 CFR Part 60 Standards of	rodali di la	stream has been diverted from the flare.	in the semi-annual reports.  No vent streams were	□Intermittent
Sources §40 CFR 60.565]			this reporting period.	
(Reporting and recordkeeping requirements.)				
107 - PROPYLENE UNLOADING RACK	Section D - VI. Work Practice Standards	[Authority for this permit condition is derived from 40 C.F.R.	Facility has work prosting	
[40 CFR Part 60		Soc.soz-z(a).]	and procedures in place, including VOC monitoring	☐ Intermittent
Performance for New Stationary Sources §40 CFR		(a) The permittee shall demonstrate compliance with the requirements of 40 C.F.R. §§60.482-1 through 60.482-10 or §60.480(e) for all equipment	of the facility LDAR Program.	
60.482-1]			(c) Statement of law that imposes no compliance	
(Standards: General.)		(b) Compliance with 40 C.F.R. §§60.482-1 to 60.482-10 will be determined b	obligations and is thus not amenable to certification. Additionally, the facility	
			has chosen not to apply	

Citation	Citation Permit	lerms & collations contained	
	Section	in the Permit	Compliance Status
	1	74	or a determination of
		e	equivalency during the
		C	current compliance period.
107 - PROPYLENE	Section D - VI. Work	S	Except as reported and submitted in Sunoco's
	Practice Standards	nis permit condition is derived from 40 C.F.R.	compliance certification or
[40 CFR Part 60		§60.562-2(a).]	deviation reports, the
Standards of			Sunoco flare is operated
Performance for			and maintained in
New Stationary Sources §40 CFR		(a) Closed vent systems and control devices must comply with the respective provisions specified in 40 C.F.R. § 60.482-10.	compliance with 40 CFR 60.18. The closed vent
60.482-10]			system is part of the
(Standards: Closed			facility LDAR Program.
control devices )		paragraphs (i) through (k) of this sec	facility's mechanical
			integrity program were
			conducted during this
			The closed vent system is
			in continuous operations
			when emissions may be
9.			vented through it.
	Soption D VI Work		Except for compressors
UNLOADING RACK	Practice Standards	routhority for this permit condition is derived from 40 C.F.R.	which are controlled by 40 CFR § 60.482-10; and
			compressors that have no
Standards of		200.00t +\2/2	detectable emissions and
Performance for	s		alle subject to 40 of 15
New Stationary		(a) Each compressor shall be equipped with a seal system that	compressors are either
Sources §40 CFR		includes a barrier fluid system and that prevents leakage of VOC	equipped with a barrier
00.402-0]		to the atmosphere, except as province in to constant and paragraphs (h), (i), and	fluid system that prevents

	All leaks were repaired within 5 calendar days or placed on delay of repair.	in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determ		60.482-4] (Standards: Pressure relief devices in gas/vapor service.)
⊠Continuous □Intermittent	and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.	[Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]	- lacitos Stalldal OS	[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR
	The facility did not exempt any compressors based on this condition during the compliance review period.		Section D - VI. Work	107 - PROPYLENE
	Facility has work practices and procedures in place, including VOC monitoring reports maintained as part of the facility LDAR Program.			
	(f) Statement of law that impose no compliance obligations and are thus not amenable to certification			
	atmosphere or are vented to a control device.			(Compressors)
with Terms & Conditions was:	Compliance Status	in the Permit	00000	Compression
Compliance	Means of Determining	rerins & Conditions Contained	Section	
Page 85		Town 6 0 1111	Permit	Citation

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK **UNLOADING RACK** 107 - PROPYLENE Standards of Sources §40 CFR Performance for [40 CFR Part 60 systems. 60.482-5] **New Stationary UNLOADING RACK** Sampling connection (Standards Standards of 107 - PROPYLENE Sources §40 CFR Performance for [40 CFR Part 60 60.482-6] **New Stationary UNLOADING RACK** lines. ended valves or (Standards: Open-Standards of [40 CFR Part 60 Performance for 107 - PROPYLENE Citation Practice Standards Section D - VI. Work Section D - VI. Work Practice Standards Section D - VI. Work Practice Standards Section Permit §60.562-2(a).] [Authority for this permit condition is derived from 40 C.F.R. closed-purge, closed-loop, or closed-vent system, except as C.F.R. §60.482-5. provided in 40 C.F.R. §60.482-1(c) and paragraph (c) of 40 (a) Each sampling connection system shall be equipped with a (b) Each closed-purge... §60.562-2(a).] [Authority for this permit condition is derived from 40 C.F.R. 40 C.F.R. §60.482-1(c) and paragraphs (d) and (e) of 40 C.F.R. cap, blind flange, plug, or a second valve, except as provided in [Authority for this permit condition is derived from 40 C.F.R. §60.482-6 (a)(1) Each open-ended valve or line shall be equipped with a §60.562-2(a).] (2) The cap, blin... olfactory, or any other detection method at pumps and valves in (a) If evidence of a potential leak is found by visual, audible, Terms & Conditions Contained in the Permit a closed purge system. systems are equipped with Sampling connection The closed purge system to a control device. transport the purged fluid is designed to capture and during the compliance based on this condition any sampling systems The facility did not exempt including VOC monitoring and procedures in place, Facility has work practices review period. Means of Determining of the facility LDAR reports maintained as part missing from open-ended upon discovery of openwas immediately replaced Miscellaneous caps ended line lines. Each missing cap and procedures in place, including VOC monitoring Facility has work practices of the facility LDAR reports maintained as part Compliance Status □Intermittent Conditions was: ⊠Intermittent ☐Continuous with Terms & Compliance ☐Intermittent

	contained	Means of Determining	Compliant
7000			Compliance
Section	in the Permit	Compliance Status	with Terms &
	heavy liquid service, pressure relief devices in light liquid or	Program.	
	lieavy liquid service, and	>	
		within 15 calendar days or	
		placed on delay of repair.	
Section D - VII. Additional	This source consists of a loading rack, storages, and transfer lines for purchased polymer grade propylene and purchased	Statement of law that	⊠Continuous
מומות	refinery grade propylene.	obligations and is thus not amenable to certification.	□Intermittent
Section D - VII.		Eacility has work proction	
	his permit condition is derived from 40 C.F.R.	and procedures in place, including VOC monitoring	□Intermittent
		reports maintained as part	8
		Program.	
	ally	(b) Statement of law that	
	wn. Repair of this	obligations and are thus not amenable to	
		acility has not chosen to	
		heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and  This source consists of a loading rack, storages, and transfer lines for purchased polymer grade propylene and purchased refinery grade propylene.  [Authority for this permit condition is derived from 40 C.F.R. §50.562-2(a).]  [Authority of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infleasible without a process unit shutdown. Repair of this equipment shall occur before the end	heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and  This source consists of a loading rack, storages, and transfer lines for purchased polymer grade propylene and purchased refinery grade propylene.  [Authority for this permit condition is derived from 40 C.F.R. §60.562-2(a).]  [Authority for this permit condition is derived from 40 C.F.R. section will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK VOC.) [40 CFR Part 60 **UNLOADING RACK** 60.562-2] Sources §40 CFR **New Stationary** Performance for Standards of 107 - PROPYLENE Equipment leaks of (Standards) §123.21] PUMP ENGINES [25 Pa. Code 108 - FIRE WATER 108 - FIRE WATER (General) Citation Additional Section D - VII Requirements Restrictions -Section D - I. Section D - I. Restriction(s) Emission Restrictions -Section Permit [Additional authority for this permit condition is also derived from with the requirements specified in 40 C.F.R. §§60.482-1 through 25 Pa. Code § 127.512(h).] 60.482-10. (a) As per 40 C.F.R. §60.562-2(a), the permittee shall comply (b) As per 40 C.F.R. §60.562-2(d), the permittee shall comply of the sulfur oxides, expressed as SO2, in the effluent gas of sulfur oxides from a source in a manner that the concentration exceeds 500 parts per million, by volume, dry basis No person may permit the emission into the outdoor atmosphere Each emergency engine shall be operated less than 500 hours Terms & Conditions Contained in the Permit This is a historical repair during this utilize this exemption for requirement and imposes compliance review period during the current period no specific requirements instituted at startup. elect this option during the current compliance period of equivalency during the apply for a determination Facility has chosen not to current compliance period Facility has chosen not to LDAR program was amenable to certification Statement of law not reporting consistent with 40 CFR 60.486 and recordkeeping and LDAR work practice for The facility adheres to Means of Determining 60.487. Facility tracks fire water engine operating time on a **Compliance Status** ☐Intermittent Conditions was: ☐Intermittent with Terms & Compliance

	٦	r
	'n	۲
i	ä	í
1	ř	۲
ď	•	1
1	О	٥
1	-	5

	Down:			Page 89
Cimino	rennit	Terms & Conditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms &
PUMP ENGINES	Operating Hours	in a consecutive 12-month period.	Continuo	
[25 Pa. Code §129.93]	Restriction(s)		continuous basis	□Intermittent
(Presumptive RACT emission limitations)				
108 - FIRE WATER PUMP ENGINES	Section D - I. Restrictions -	The permittee must operate the emergency stationary RICE according to the requirements specified below as per	The facility tracks	⊠Continuous
[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]	Restriction(s)	paragraph(f) of 40 C.F.R. §63.6640. In order for the engine to be considered an emergency stationary RICE, any operation other than emergency operation, maintenance and testing, emergency de	operating hours of each engine to confirm the uses are within guidelines.	□Intermittent
(How do I demonstrate continuous compliance with the emission limitations and operating limitations?)				
108 - FIRE WATER PUMP ENGINES	Section D - III. Monitoring	The permittee shall monitor and record the operating hours each time the engines are operated.	The facility tracks	⊠Continuous
[25 Pa. Code §127.441]	Nedmente		engine to confirm the uses are within guidelines.	□Intermittent
(Operating permit terms and conditions.)				
108 - FIRE WATER PUMP ENGINES	Section D - III.  Monitoring  Requirements	The permittee must install a non-resettable hour meter.	Facility performs routine	⊠Continuous
[40 CFR Part 63	8		records operating hours.	□Intermittent

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK §40 CFR 63.6625] Source Categories **NESHAPS** for maintenance operation, and installation, monitoring, (What are my §127.441] PUMP ENGINES requirements?) conditions.) (Operating permit terms and [25 Pa. Code 108 - FIRE WATER keep?) PUMP ENGINES §40 CFR 63.6655] NESHAPS for [40 CFR Part 63 108 - FIRE WATER Source Categories (What records must i Citation Recordkeeping Requirements Requirements Recordkeeping Section D - IV. Section D - IV. Section Permit engines are operated The permittee shall keep the following records each time the (a) The date on the stationary RICE in order to demonstrate that the (c) Hours operated (b) The reason(s) the engine was operated stationary RICE was operated and maintained according to owner's maintenance plan. The permittee must keep records of the maintenance conducted Terms & Conditions Contained in the Permit operating hours of each are within guidelines. engine to confirm the uses The facility tracks ensure the engines are Means of Determining maintenance performed to The facility documents any recommendations. following manufacturer's recommended weekly this reporting period. for one isolated week in preventative maintenance the manufacturer's The facility did not perform Facility was in a significant maintenance outage Compliance Status Conditions was: **⊠**Continuous ☐Intermittent ⊠Intermittent with Terms & Continuous Compliance

Citation	Permit	T		- 290
	:	refilis & Coliditions Contained	Means of Determining	Compliance
	Section	in the Permit	Compliance Status	with Terms & Conditions was:
			during this event. Additional training and communications were implemented to ensure all required preventative maintenance tasks are completed regardless of the operation of the production facility.	
108 - FIRE WATER PUMP ENGINES	Section D - IV. Recordkeeping Requirements	(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).	The facility maintains necessary operating and	⊠Continuous
[40 CFR Part 63 NESHAPS for Source Categories		(b) As specified in §63.10(b)(1), you must keep each record for	maintenance records.	∐Intermittent
(In what form and how long must I		maintenance, corrective action, report, or record.		
keep my records?)		(c) You		
PUMP ENGINES	Section D - VI. Work Practice Standards	The permittee shall maintenane and operate the source in accordance with manufacturers specifications.	The facility maintains manufacturer	Continuous
[25 Pa. Code §129.93]			specifications. Routine preventative maintenance is scheduled through the	⊠Intermittent
(Presumptive RACT emission limitations)			facility's maintenance tracking system.	i i
			The facility did not perform the manufacturer's recommended weekly preventative maintenance for one isolated week in	
			יפי פייפ יפטומונים איכפע ווו	T THE STATE OF THE

	operating hours and a			[40 CFR Part 63 NESHAPS for
⊠Continuous  ☐Intermittent	The facility uses established tracking spreadsheets to document	(a) The permittee must be in compliance with the requirements in this subpart that apply to you at all times.	Section D - VI. Work Practice Standards	108 - FIRE WATER PUMP ENGINES
				existing stationary RICE located at an area source of HAP emissions?)
		b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes fir		(What emission limitations and operating limitations must I meet if I own
	system.			Source Categories §40 CFR 63.6603]
□Intermittent	maintenance is scheduled through the facility's maintenance tracking	The permittee must comply with the following requirements as specified in Item 4 of Table 2d to 40 C.F.R. 63 Subpart ZZZZ:	Section D - VI. Work Practice Standards	108 - FIRE WATER PUMP ENGINES [40 CFR Part 63
X Continuous	Routine preventative	The state of the s		
	this reporting period.  Facility was in a significant maintenance outage during this event.  Additional training and communications were implemented to ensure all required preventative maintenance tasks are completed regardless of the operation of the production facility.			
with Terms & Conditions was:	Compliance Status	in the Permit	Section	
Compilance	Means of Determining	Terms & Conditions Contained	Permit	Citation Permit

Citation	Permit	Terms & Conditions Contained		Page 93
	Section	on contained	Means of Determining	Compliance
		in the Permit	Compliance Status	with Terms &
Source Categories		(b) At all times the permittee must operate and maintain the		Conditions was:
(What are my general		engines in a manner consistent with safety and good air pollution control practices for minimizing emissions.  Determination of w	maintenance scheduling system to confirm that preventative maintenance is performed.	
requirements for complying with this subpart?)				
108 - FIRE WATER PUMP ENGINES	Section D - VI. Work Practice Standards	(a) The permittee must operate and maintain the stationary RICE according to the manufacturer's emission-related written	The facility uses	⊠Continuous
[40 CFR Part 63 NESHAPS for		provide to the extent practicable for the maintenance and	spreadsheets to document	□Intermittent
Source Categories §40 CFR 63.6625]		operation of the engine in a manner consistent with good air poll	maintenance scheduling system to confirm that	
(What are my monitoring, installation,			is performed.	
operation, and maintenance requirements?)				
108 - FIRE WATER PUMP ENGINES	Section D - VI. Work Practice Standards	The permittee must demonstrate continuous compliance with the requirements in Item 4 of Table 2d to 40 C F R 63 Subsections	The facility uses	Continuous
[40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]	2		spreadsheets to document operating hours and a maintenance scheduling system to confirm that	⊠Intermittent
(How do I demonstrate		(a) Operating and maintaining the stationary RICE according to the manufa	preventative maintenance is performed.	
continuous compliance with the emission limitations			The facility did not perform the manufacturer's recommended weekly	
			preventative maintenance	

Page 94

Certification of Continuous or Intermittent Compliance 23-00012 - BRASKEM AMER INC/MARCUS HOOK and operating limitations?) PUMP ENGINES §40 CFR 63.6595] Source Categories **NESHAPS** for 108 - FIRE WATER subpart?) [40 CFR Part 63 comply with this §127.441] ASSISTED) SYSTEM (STEAM-C02 - FLARE (When do I have to terms and [25 Pa. Code (Operating permit Citation Requirements Additional Section D - VII. Requirements Monitoring Section D - III. Section Permit 40 C.F.R. 63 Subpart ZZZZ no later than May 3, 2013. The permittee must comply with the applicable requirements of [Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).] The permittee shall Terms & Conditions Contained in the Permit this reporting period. during this event. maintenance outage for one isolated week in Additional training and Facility was in a significant implemented to ensure all communications were the operation of the completed regardless of maintenance tasks are required preventative production facility. operating hours and a Means of Determining spreadsheets to document established tracking The facility uses is performed. preventative maintenance system to confirm that maintenance scheduling gas analyzer. Flare exit BTU value using a flare a dedicated flare flow velocity is measured using The facility measures flare Compliance Status Conditions was: ☐Intermittent **⊠**Continuous with Terms & Compliance ☐Intermittent

	racility's total event			
27	reported via routine "odor and visible emission inspections" and the	(b) The permittee shall submit		
	correction of deviations			10
	practices include a	which is expected to last longer than two hours.		conditions.)
	terms and conditions of	(a) The permitee shall notify the Department within two hours		(Operating permit
	requirements and as specified by individual			§127.441]
□Intermittent	and procedures in place in accordance with applicable regulatory	[Additional authority for this permit condition is also derived fom 25 Pa. Code § 127.512(h).]	Requirements	ASSISTED)
X Continuous	Facility has work practices		Section D - V.	C02 - FLARE
		(2) At least 90% of each quarter's data shall be available at all		
	review period.	(c) the calculations of the net heating value and the exit velocity, on a three (3) hour rolling average		terms and conditions.)
	accordance with 40 CFR	(b) the readings of the exit velocity		
	and data availability. Reports were submitted in	(a) the readings of the heat content		[25 Pa. Code 8127 4411
Intermittent	maintained for the net heating value, exit velocity.		Requirements	ASSISTED)
	Facility records are	(1) The permittee shall maintain daily records of :	Section D - IV.	C02 - FLARE
		(b) monitor continuously the velocity of the gas	- 23332	
		ng a		3
		(a) monitor continuously the heat content of the flore and		conditions.)
with Terms & Conditions was:	Compliance Status	in the Permit	Section	
Compliance	Means of Determining	reinis & conditions contained		
CR ASP		Torme & Conditions Cont.	Permit	Citation

	engineering practices.	(a) operate and maintain all devices according to		[25 Pa. Code
□Intermittent	analyzer and flow meter in		Practice Standards	SYSTEM (STEAM- ASSISTED)
Continuous	Facility has system in	The permittee shall	Section D - VI. Work	C02 - FLARE
	these work practices.			
	records associated with			
	staff of the reports and			
	Braskem America, Inc.			
	consisted of a review by			
	review for this term			
	Detection and Repair			
	hydrocarbon Leak			
	process, and the			
	total event reporting			
	inspections", the facility's			
	and visible emission			
	reported via routine "odor			
	correction of deviations			
	process for review and			
	practices include a			
	conditions below. These			conditions.)
	permit terms and			terms and
	specified by individual			(Operating permit
	requirements and as			
	applicable regulatory			8127,4411
	work practices in place, in			
	property, the racility has	conformance with 25 Pa. Code Section 123.31		ASSISTED)
Intermittent	malodors outside of the	contaminants detectable beyond the plant's property in	Practice Standards	SYSTEM (STEAM-
⊠Continuous	To prevent the detection of	The flare shall be operated with no emissions of malodorous air	Section D - VI. Work	C02 - FLARE
	ופטטונווט טוסטנטי.			
	מספרים הייסים			
Conditions was:			Section	
with Terms &	Compliance Status	in the Permit	0	1
		Lettis & Collations Collianien	Permit	Citation

•	U
0	ŭ
Œ	2
(	D
r	n
ζ	SI

		The flare system is for the control of Volatile Organic Compound (VOC) emissions from Plant 1 and Plant 2 manufacturing sources, except the typical atmospheric venting - PSV lifts, etc.		(Operating permit terms and conditions.)
□Intermittent	not amenable to certification.			[25 Pa. Code §127.441]
Continuous	Statement of law that impose no compliance	[Additional authority for this permit condition is also derived from	Additional Requirements	SYSTEM (STEAM- ASSISTED)
			Section D - VII	C02 - FLARE
		(b) calibrate the GC analyzer and the gas flow meter, according to manufacturer's specifications and/or good operating practices, monthly.		conditions.)
	monthly basis.			(Operating permit terms and
	equipment take place on a	manufacturer's specifications and/or good operating practices.		8727.447]
with Terms & Conditions was:	Compliance Status	in the Permit		
Compliance	Means of Determining	on a contamed	Section	
Page 97		Terms & Conditions Contained	Permit	Citation

6)			